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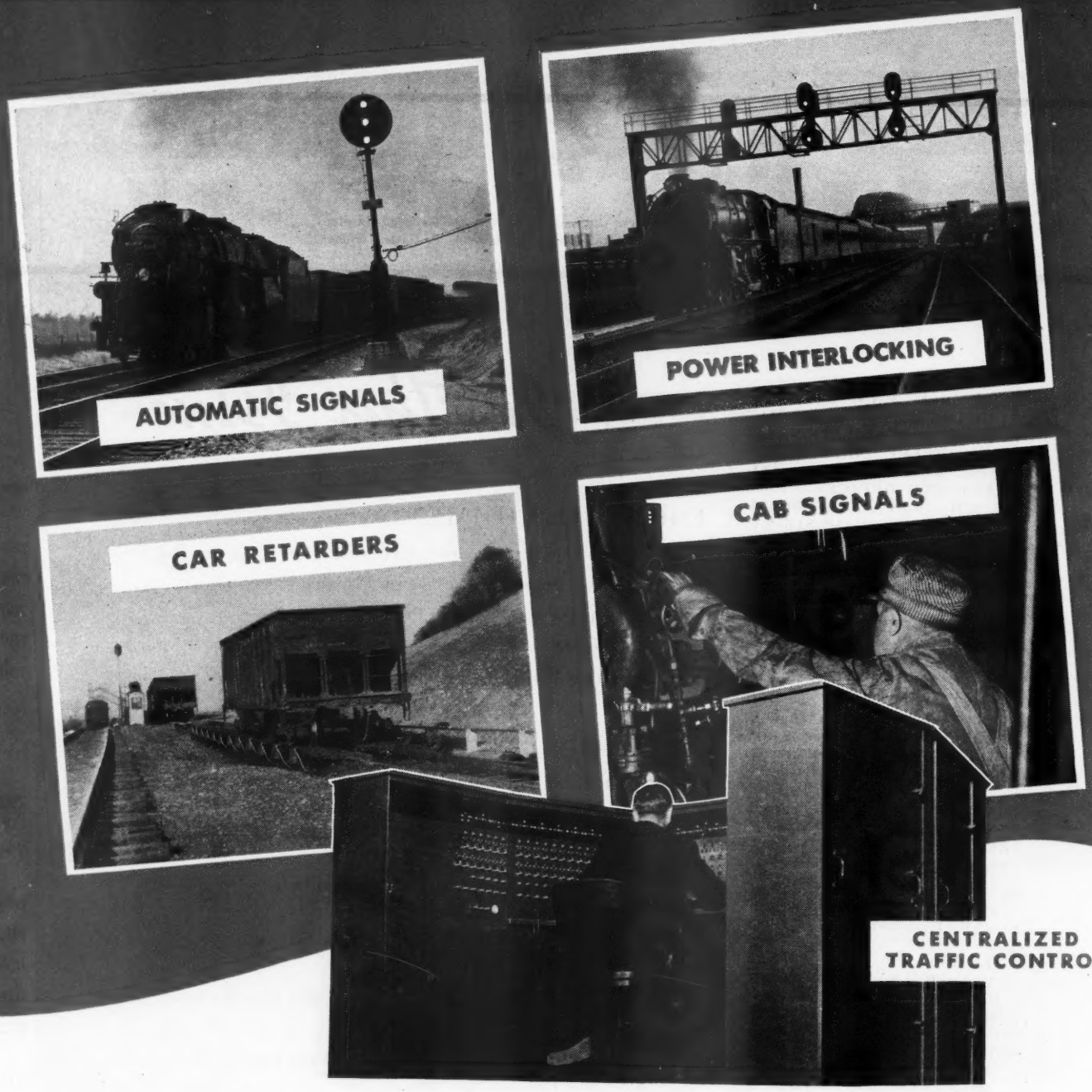

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The Week at a Glance

RRs VIEW TRAVEL OUTLOOK: This issue is given over entirely—with the exception of its news pages—to our fifth annual survey of passenger traffic developments and prospects. Probably the most significant revelation in the whole book is the view regarding the future of passenger traffic, as disclosed to us by railway executives and passenger traffic officers. With surprising unanimity those interviewed voiced opinions quite the opposite of pessimistic on the likelihood of the railroads' retaining a substantial passenger volume in the postwar years. This is not just Pollyanna stuff—the carriers know they are going to have able competition. They also know, however, better than they ever did before, what it takes to hold and build travel volume—and they are going to put this knowledge to work. See page 794 for this report.

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***HOW* ALL THE TRAVEL?:** What is it about railroad operation today that is enabling the carriers to haul close to twice the passenger traffic of 1920 with half the engines and two-thirds the cars? The leading editorial in this issue examines the figures for the answer to this question. It is revealed that increased occupancy per car (1943 compared to 1920) is exactly cancelled out by the reduction in the number of cars. So it is that the increase in traffic handled is ascribable to greater mileage per car per day—this, in turn, being accounted for, in part, by higher train speeds—but especially by greater ingenuity in keeping cars in motion. Fewer locomotives did a bigger job by pulling, on the average, about 40 per cent more cars and by performing better than 60 per cent more daily mileage—the latter being further evidence of the development of skill in equipment utilization during the past 23 years.

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PROFIT IN PASSENGERS?: The usual assumption on most roads is that passenger business is a loser, in normal times, because it is shown that way in I. C. C. statistics. An editorial in these pages reminds us, however, that the I. C. C. assigns common expenses on an arbitrary basis of relative train-hours—and that the true test of the traffic's profitability is: Would a railroad show more net earnings without passenger traffic (and its attendant expense) than it would if it retains this business? There is a story of a man who believed he could never grow bald because he could lose any one hair without entering the billiard-ball category. So, many kind rivals have offered to "relieve" the railroads of various allegedly "unprofitable" traffic (such as trucks the l.c.l. and barge lines the low-value commodities)—but there is not much evidence that railroads when so "relieved" have thereby become more prosperous.

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CIVILITY NOT RATIONED: There may be too few seats and berths and a shortage of victuals in the dining cars—but there is a plentiful store of ordinary courtesy available, so each customer may have an ample supply, if only employees can be induced to scatter this commodity rather than hoard it. An editorial herein suggests, also, that it is to their personal interest thus to deal with customers—because the postwar travel volume will govern the number of postwar jobs, and the passenger slighted now will be the first to divert his custom elsewhere, when opportunity affords.

●

CHEER FROM FLETCHER: If there is any railroad man in a position to know how circumstances which will control the carriers' future are shaping up, that man is the chairman of the Railroad Committee for the Study of Transportation. Since this committee is delving into practically all the external and internal factors which might have a bearing on future trends, the opinions of the group's chairman on what lies ahead must stem more from facts and less from predilections than those of most railroaders. It means a great deal, therefore, that Judge Fletcher, with his factual background, is optimistic—and his report on the occasion for his hopefulness appears in the news pages herein.

●

EXPEDIENTS: Not to have passenger service log-jam on them in the present inundation of traffic, railroad ingenuity has yielded many devices to stretch limited facilities out over the largest possible volume. Separating ticket-buyers by local and interline, simpler ticket accounting, supplementing dining cars with box lunches, limiting ticket sales to available space—these and many other such helpful schemes are reviewed in an article on page 806.

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WARNS ON RATIONING: There was a meeting in Chicago this week of railroad and military passenger traffic people—called together by O.D.T. Director Eastman to evolve ways and means of dealing with a further increase of 20 per cent in passenger volume on the railways. Mr. Eastman has misgivings at the growing demand (on the part of those who believe they have an "in" for high priorities) that travel be rationed. He doesn't believe such rationing to be feasible, and he deems it generally advantageous to serve the public, if possible, in a manner calculated to still the voices of rooters for rationing.

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UNREPENTANT MALIGNER: Having had his attention called to his misrepresentation of the proposal for transportation "integration" advocated by the Transportation Association of America, Henry Wallace has not only neglected to correct his misstatements, but has used the occasion to utter more untruths about conditions in and surrounding transportation. Furthermore, he has made known his intention to express himself "more fully in regard to the plan for seizing control of all forms of transportation which has been advanced by this [Transportation] Association." The only considerable mystery about Wallace is why the victims of his calumny persist in attributing honest intentions to actions and words in which, from anyone else, unalloyed malevolence would be instantly recognized.

SHADOW BOXING: Stabilizer Vinson insisted to a Senate committee this week that a flat 8 cents more per hour for the non-ops would cause inflation—while his own scheme for distributing practically the same amount of additional money, on a sliding-scale basis, wouldn't be inflationary. In either case, an additional $200,000,000 is to be given to the non-ops to buy a supply of goods which, under war-rationing, cannot be increased—and it is impossible for anybody to explain how a distribution of this sum according to the Vinson formula is less inflationary than the way the non-ops want to hand it around. It is the extra money in the hands of spenders that is inflationary, and to that the Stabilizer doesn't object.

●

WHAT KIND OF TRAINS?: The course which physical development of postwar passenger equipment will probably follow is pretty well delineated in the most modern cars and power already running—is the editorial opinion set forth herein. The lightweight, more comfortable, more attractive car we already have—but there will be better ones and many, many more of them. There will be some experimental locomotives, but, in the immediate future anyhow, new power is likely to consist of an evolutionary development of existing designs.

●

MOTIVE POWER EVOLUTION: In 1936, passenger locomotive-miles operated by the railroads were divided as follows among the three classes of power: Steam 95.5 per cent, electric, 4.1 per cent, Diesel 0.4 per cent. In the first 8 months of the current year the division has been as follows: Steam about 85.9, electric 5.2, Diesel 8.9. These and other significant trends in motive power types and utilization are discussed in an article beginning on page 826.

●

NO TRAINS, NO VICTORY: The public might find a welcome, and certainly an instructive, respite from the Buck Rogers' and "Superman" word-pictures constantly dangled before them by "brave new world" planners of a "dynamic America", by a down-to-earth look at the transportation mechanism which is winning the war for us; and thus permitting the rocket-ship dreamers to exist, and to give vent to their pretty fantasies. The plane is doing military wonders, but these are in the realm of combat, not markedly in that of volume transportation. How well the railroads are doing the big and indispensable job of basic movement of people as well as goods, is testified to by high government officials (page 800).

●

PARTING THOUGHT: One result of the war's experience, which apparently is impressing itself on more and more railroad men, is the realization that railroads are intrinsically a large-volume agency of transportation; that, given the volume, they can operate profitably even at extremely low rates; and, conversely, that low "incentive" rates are one of the means of attaining profitable volume.

A Unique Achievement in Transportation

The performance of the railways and Pullman Company in handling passenger traffic in 1943 has been as phenomenal and unique as any achievement in the history of transportation. Almost twice as much of such traffic has been handled as in the pre-war record year 1920 with only half as many passenger locomotives and two-thirds as many passenger-carrying cars; and about four times as much has been handled as in 1940 with slightly less equipment. How this has been accomplished is told at length in articles appearing elsewhere in this issue, and is indicated in summary form by statistics for July, 1920, 1940, 1942 and 1943 given in an accompanying table.

It has been made possible largely by increases in the number of passengers occupying each car and train. But this is but part, and the least important part, of the story. Average number of passengers per car was 22 in July, 1920; 14.8 in 1940; 24.5 in 1942; and 33.8 in 1943.

That is, each car, on the average, was occupied at any given time by 53 per cent more passengers in July, 1943, than in July, 1920. But, by a coincidence, there were exactly 53 per cent more passenger-carrying cars available in 1920 than in 1943. It follows that if cars had been kept moving only as well in 1943 as in 1920 only about the same amount of traffic would have been handled. Actually, the average movement of passenger-carrying cars per day was increased from 168 miles in July, 1920, to 226 in 1942 and to 293 in 1943, this being partly due to faster speeds of trains, but also to the use of every prac-

Efficiency FOR VICTORY

Railway Performance in Handling Passengers

	July 1920	July 1940	July 1942	July 1943
Number of passenger locomotives	13,562	7,306	7,017	6,813
Number of passenger-carrying cars	41,564	27,592	27,706	27,151
Passengers carried one mile (thousands), average daily	154,871	72,374	153,693	269,104
Pass. train-miles, average daily	1,568,000	1,082,000	1,159,000	1,282,000
Pass. train-miles per locomotive, average daily	116	148	165	188
Passenger-carrying car-miles, average daily	7,008,000	4,892,000	6,271,000	7,967,000
Average miles per pass. car daily	168	177	226	293
Average pass.-carrying cars per train	4.5	4.5	5.4	6.2
Average passengers per car	22.1	14.8	24.5	33.8
Average passengers per train	98.7	66.9	133.0	209.8
Average trip per passenger (individual railway)	41.9	57.2	79.2	98.3
Passengers carried one mile per locomotive, average daily	11,419	9,906	21,903	39,499
Passengers carried one mile per pass. car, average daily	3,726	2,623	5,547	9,911

ticable means of keeping cars out of shops, yards and stations, and actually running. The resultant of the increases in (1) passengers per car and (2) daily movement per car was an increase from 3,726 passengers carried one mile daily per car in July, 1920, and from 2,623 in 1940, to 5,547 in 1942 and to 9,911 in 1943. In other words, the amount of service rendered daily with each car in July, 1943, was two and two-thirds times as great as in pre-war record year 1920, almost four times as great as in 1940, and 80 per cent greater than in 1942.

The number of passenger locomotives available, as already stated, has been only half as great in 1943 as in 1920. But in July, 1943, each locomotive, on the average, was run 188 miles daily as compared with 116 in 1920; 148 in 1940, and 165 in 1942; and in July, 1943, each locomotive, on the average, pulled a train of 6.2 cars, as compared with 4.5 cars in 1920 and 1940, and 5.4 cars in 1942. Consequently, on the average, each locomotive produced 522 passenger-carrying car-miles of service daily in July, 1920; 666 car-miles in 1940; 891 car-miles in 1942; and 1,166 car-miles in 1943.

Average passengers per train increased from 99 in July, 1920, and

from 67 in 1940, to 133 in 1942 and to 210 in 1943. Consequently, on the average, the service rendered by each locomotive increased from the equivalent of moving 11,419 passengers one mile daily in July, 1920, and from 9,906 in 1940, to 21,903 in 1942 and to 39,500 in 1943. That is, service rendered per locomotive in carrying passengers in July, 1943, was three and a half times as great as in 1920, five times as great as in 1940, and 80 per cent greater than in 1942.

As in the case of cars the phenomenal increases in service rendered per locomotive have been partly due to faster speeds of trains, but also to the use of every practicable means to reduce the time spent by locomotives in shops for repair and at terminals, thereby to increase the time they could be used in hauling trains.

The record thus far made in meeting the demand for passenger service is almost incredible. In 1942 travel by rail in every month after February was larger than in the preceding month. In 1943, after having made an all-time monthly high in August, it declined in September to the lowest level since May. Perhaps inconveniences and discomforts, and efforts to reduce unnecessary travel, have begun at last to have an effect. It is devoutly to be hoped this is the case; for in many parts of the country passenger-carrying capacity had been about exhausted.

Fixed Properties And Postwar Planning

While the railways concentrate their attention on the immediate job of war transportation, and, in fact, are striving to improve their already remarkable performance in doing that job, their managements and passenger traffic officers are laying plans for postwar passenger service that will eclipse in speed, comfort, convenience and economy anything that has been offered to the public in the past. Carrying forward the progress in equipment design of the last decade, the important developments in construction materials brought about by the war, and the experience of war-time train operation, there is no question that these plans for improved passenger service will prove entirely practicable from the standpoint of both equipment and methods of operation. The remaining factor essential to their success, and no less essential than the other two, is the adequacy of the fixed properties to sustain the type of passenger service contemplated.

Without the appeal that lies inherently in modern streamlined equipment, the tracks, bridges, fuel and water plants, signals, terminal facilities and passenger stations—as important to safe, comfortable and otherwise attractive, streamlined passenger service as suitable equipment and operating methods—are often given secondary consideration in plans for improved service. But, the fact that they cannot be overlooked entirely—that they must be brought into step—has been demonstrated on every road that has inaugurated fast passenger train schedules in the past. And this will be demonstrated again and again still more conclusively after the war as one road after another attempts to step up the quality and speed of its passenger service on tracks which, with auxiliary roadway and terminal facilities, have been necessarily under-maintained throughout the war.

Lest there be any misunderstanding or underestimation in this regard, with consequent delay in activating otherwise well-formulated plans, engineering and maintenance officers should be represented on all groups or committees considering postwar passenger service. With such representation, they will be in a position to advise and plan for what will be required in track construction and maintenance; what will be necessary in the way of line changes, curve reduction and turnout construction to permit sustained high-speed operation; what will be necessary in the way of new or revised signal installations to keep the fastest trains moving safely with minimum interference with slower trains; what will be necessary in fuel and watering facilities to insure maximum efficiency of locomotive operation and minimum lost time in making fuel and water stops; what will be necessary in locomotive and car servicing and repair facilities at terminals and at other points on the line; and, of major importance, if a heavily lopsided, incomplete and unsatisfactory program is to be avoided, what must be done to hundreds of passenger stations to bring them into harmony with the type of train service that is planned.

Postwar planning for efficient, fast, safe and comfortable passenger train service—the only kind of service that will enable the railways to compete successfully in the postwar period against the attractive features that will be offered by air and highway travel—is not a one-department matter. Only as all the departments vitally affected are brought into the picture, and the earlier the better, can sound, fully effective plans be made.

The Postwar Passenger Problem

Interviews secured by *Railway Age* from numerous railway officers, and quoted elsewhere in this Passenger Progress Annual, show that most railways will try to retain after the war all the passenger traffic that can be held by improved equipment, faster and otherwise better service and lower rates. Why are they planning thus, in view of the fact that passenger service on most lines, and on the railways as a whole, has been regarded, especially within the last two decades, as unprofitable? Perhaps it has not been as unprofitable as believed, and can be made less unprofitable, or even more profitable, on many railways after the war than it was before the war.

The Interstate Commerce Commission requires the railways to report estimates of the financial results of their freight and passenger services which result in allocations of operating expenses closely conforming

with train-hours. For example, in 1941 on Class I railways freight train-hours were 75.6 per cent, and passenger train-hours 24.4 per cent, of total train-hours. Therefore, approximately 75.6 per cent of total operating expenses, equipment and joint facility rentals and taxes in 1941 were assigned, under the Commission's formula, to freight service and 24.4 per cent to passenger train service. Statistics made by this process indicate that in 1941 freight earnings exceeded freight operating expenses by $1,711 million, while passenger service expenses exceeded passenger train earnings by $176 million. Net operating income (after taxes) from freight service in 1941 is estimated at $1,225 million, while passenger service is estimated to have incurred a net operating deficit (after taxes) of $226 million.

As estimated in the same way, the results have since been quite different. In 1942 freight train-hours were 77.9 per cent and passenger train-hours only 22.1 per cent of total train-hours. Dividing operating expenses and taxes in accordance with the Commission's formula indicates for 1942 the following results: Freight net earnings from operation, $2,219 million; passenger net earnings from operation, $179 million; freight net operating income (after taxes), $1,395 million; passenger service net operating income (after taxes), $89 million. The Commission's statisticians estimate that in the first eight months of 1943 freight net earnings (before taxes), were $1,851 million and passenger service net earnings (also before taxes) $523 million—the latter three times as large as in the entire year 1942.

These statistics prove beyond question that, with the largest passenger traffic in history, but also with the lowest passenger rates in history, the railways as a whole have derived profits from their passenger service in 1942 and 1943. On the other hand, the statistics for 1941 and previous years do not prove that in those years the railways actually lost money on passenger service. The Commission's formula assumes that if either of the two major branches of railway service earns less than the total operating expenses, plus taxes, allocated to it, it is conducted at a loss. But the question which must be answered really to determine the profitableness of passenger service is: Would the railways as a whole, or the individual railway, make more or less *total* net earnings before taxes if passenger service were discontinued? If (1) a larger decline in total operating expenses than in total operating earnings occurred, total net earnings would be increased. But if (2) a larger decline in total operating revenues than in total operating expenses occurred, then net earnings would be reduced.

It is highly hazardous to base studies of the results of rendering particular services on statistics of *total* or *average* expenses. The making of freight rates is based on the sound assumption that any *additional* traffic gained—even by making much lower than average rates—will increase net earnings if the revenue derived from it will merely add something more to total freight earnings than the handling of it will add to total operating expenses. Why, then, assume that passenger service is rendered at a loss unless passenger revenues exceed the *total* operating expenses assignable to passenger service under the Commission's formula? If the railways made all their freight rates on that assumption, they would speedily lose a large part of their freight traffic and of the net earnings from it.

The railway plant has been developed and is maintained to render passenger as well as freight service. The huge part of the investment in it that has been made for rendering passenger service is irretrievable. Probably very few railways could, by abandoning passenger service, reduce their total operating expenses as much as they would thereby reduce their total operating revenues. Therefore, the passenger problem after the war will be that of maintaining the largest practicable earnings from passenger train service. And the solution of that problem will be found mainly in the adoption of the means necessary to retaining the *largest practicable volume* of passenger traffic.

Whatever the competition with them may be, the railways cannot at any time in the conceivable future retire from the passenger business. Therefore—as the interviews with their officers quoted elsewhere in this issue indicate they are determined to do—they should prepare to make in the postwar period whatever rates, to render whatever service and to use whatever selling methods may be required to cause a larger volume of travel by railroad than ever occurred before the present war period.

How to Keep Customers

The railways have never been confronted with such a seller's market as now exists in passenger transportation. Customers literally storm ticket offices and passenger terminals in efforts to travel by rail. However, railway officers and employees should and do realize that this condition will not last. The fact that the railways are spending large sums of money in advertising to keep people off trains does not imply that passengers should be treated discourteously when they attempt to buy tickets or board trains. The effort to prevent the swamping of passenger facilities should and will be continued for the duration, but, as was pointed out in the *Railway Age* a year ago, there is no rationing of courtesy.

The large number of new employees who have limited seniority should be particularly alert to the situation. At the moment, there are more jobs than there are people to fill them, but unless the railways are successful in holding much of the present passenger traffic, the reverse will speedily be true, and it is the younger ticket sellers and the younger brakemen who will be cut off first. Each act of brusqueness or discourtesy on their part endangers their own future and imperils their chances for steady jobs. Admittedly their tasks are frequently difficult, but they should remember that

anyone whose job is not tough these days isn't doing his part in winning the war.

The railways have comprehensive plans already prepared for retaining every possible passenger after the war. Railway transportation will be priced right; new trains will be purchased in large numbers to take advantage of the tremendous advantage in comfort that is the railways' biggest asset in competition with airway or highway transportation. The success of the present institutional advertising campaign demonstrates that advertising for passengers will be conducted on a more intelligent and much larger scale than ever before. New and modernized ticket offices and passenger stations will be provided as rapidly as possible after the war. In fact, the first really concerted, nation-wide effort to keep passenger trains full is certain in the postwar period, backed by every resource that the railways have at their command. All this, however, will fall far short of the desired result if present-day passengers are given the impression that railway employees who come in contact with the public are surly and ungracious.

The retention of passengers on the railways is of vital importance to every railway employee, whether he is old or young in the service, but it is the latter group who have most at stake, since it is upon them that the ax will fall first if passenger traffic declines. The railways can no longer treat each individual passenger as an honored guest, but it certainly does not follow that he should be made to feel that he is unwelcome, as is too often the case now.

What Will Trains Be Like?

The record which the railroads have established in the handling of the tremendous volume of passenger traffic during 1943 is amazing to all students of transportation. The fact that it was accomplished in wartime, however, destroys its significance as a criterion of what may be accomplished in the future. Only under wartime conditions will travelers tolerate the crowding and other inconveniences with which they have had to put up during recent months.

When the war is over the railways will have three major competitors. These are the private automobile, the highway bus and the airplane. One of the important elements of the competition between these three agencies and the railway passenger train lies in the character of the facilities each offers to the traveler. The one element in which the passenger train is superior to each of the others is the space which can be made available per passenger. By the judicious use of this advantage in the arrangement of the accommodations in the passenger train the railway can provide comforts and conveniences which neither the automobile, nor the bus, nor the airplane can afford. Most railway traffic officers are aware of this and are planning to take advantage of it during the postwar years.

This does not imply the introduction of untried types of equipment or facilities for the comfort and convenience of railway travelers. The remarkable success of the de luxe trains of lightweight cars which were introduced during the ten years since 1934 has proved the value of features which are now clearly established. The effective elements of these trains may be listed as air conditioning, seating comfort, better and more attractive lighting, spaciousness, and the introduction of style factors which have contributed to the restoration of some measure of "glamour" to railway travel. Continued improvements in coach seating may be expected and efforts are continuing to improve the control of atmospheric conditions within passenger cars. Prospective changes in passenger-car trucks promise the greatest immediate advance in riding comfort once the war is behind us.

Wartime developments in the plastics field have attracted widespread public attention. In fact, so many new materials have been developed and they have come so rapidly that the public imagination has run riot as to what may be expected in the future. In point of fact, the railroads were among the early users of some of the new materials which were developed during the years preceding the war. They will be alert to opportunities for the useful application of the newer materials in this category as they come along. These applications will most probably be in interior finish, trim, decorations, and lighting.

Two new types of motive power will probably be tried out during the early postwar years. These are the direct-connected steam turbine locomotive and the gas-turbine locomotive. In the main, however, the designs of the locomotives which will, in quantity, replace the worn-out steam locomotives which now make up a large part of the inventory of passenger motive power, will possess the same features which are present in modern motive power now in service. This applies alike to steam, electric and Diesel locomotives.

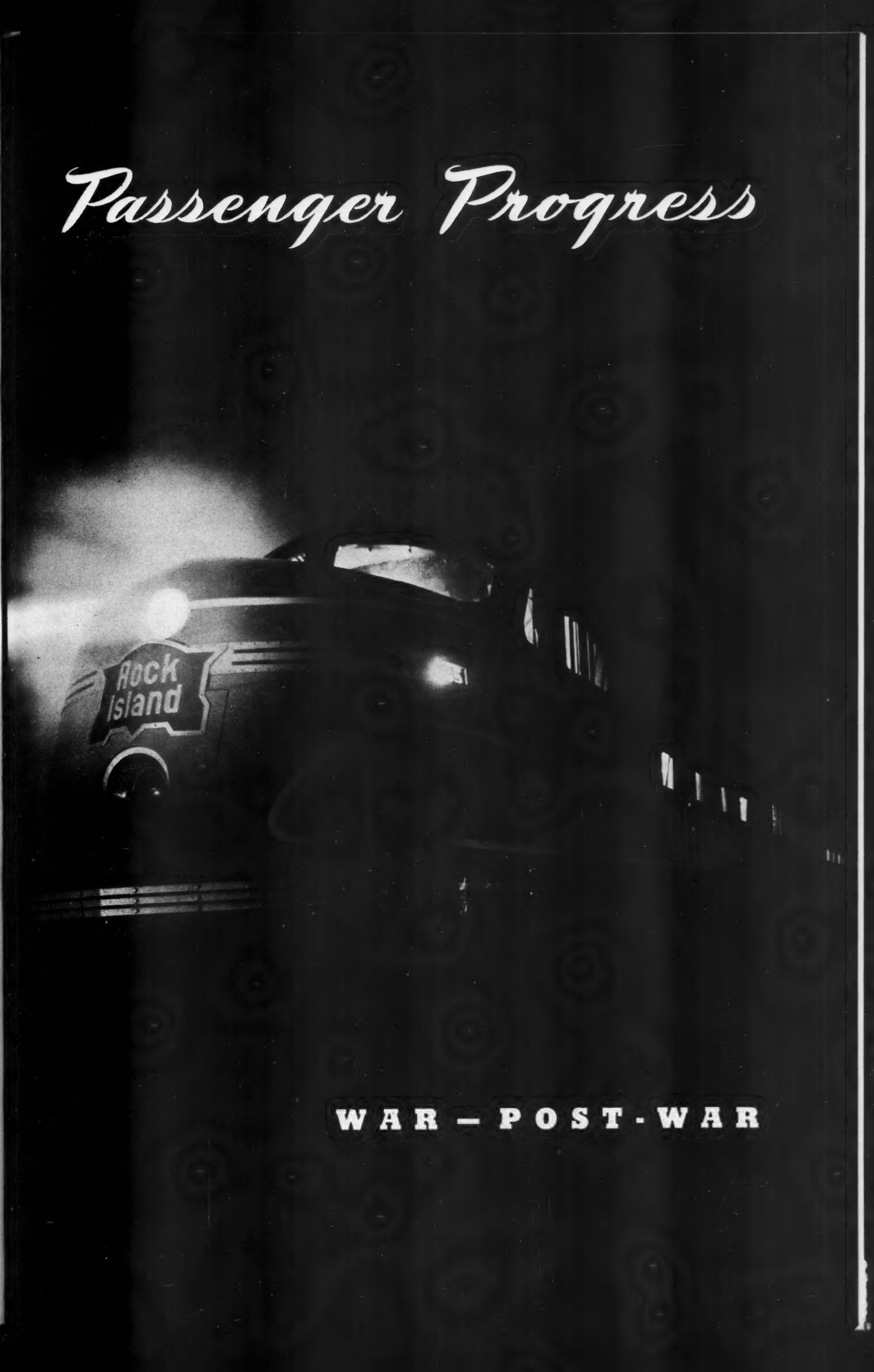
Railroads Ready for Postwar

One of the most comprehensive jobs of post-war planning that is going on in any field of enterprise today is that of the Association of American Railroads. Picked men of the railroads, from all parts of the country and from all departments of the industry, have been at work for the past year, looking into every phase of transportation, finding out the changes that are in the making, estimating their effects upon the railroads, and planning to meet them. Out of this gigantic effort there is shaping up a program for the post-war period that I believe will see us through.

Similar planning is being done by every railroad individually. In the case of the Illinois Central we are undertaking to examine into every phase of our service, to reconsider every angle of our operations, to make definite plans for meeting every condition we shall have confronting us when the war comes to an end and we return to the pursuits of peace.

—From an Address by George M. Crowson, Assistant to President, I. C.

Passenger Progress



WAR — POST-WAR

Railway Passenger Transportation —its war and post-war phases

The Last of the Modern Streamliners to Be Put in Service for the Duration—But Only the Forerunner of Hundreds of Others in the Post-War Period

Unprecedented situation created by a static equipment pool and relentlessly mounting traffic

THIS fifth annual edition of the Passenger Progress Issue of the *Railway Age* is quite different from any of its predecessors. It is necessarily so, because the situation as to railway passenger transportation is quite unprecedented. Regardless of the statistical measuring stick used, the results show almost incredible figures—all increases.

An estimated 80,000,000,000 passenger-miles will be piled up by the railways this year. This enormous figure is startling of itself, but it becomes almost fantastic when it is realized that it is almost double the total for the year 1918, when passenger traffic reached its peak in the first World War.

In 1942, troop movements were four times heavier than in 1918 and this year they are 70 per cent higher than in 1942. To evaluate these figures properly, it should be realized that, as the premier mass transportation agency, the railways are geared to handle violent fluctuations in traffic in their regular service as no other agency can. Troop movements, however, are highly irregular. They come at odd times, they require special equipment and, not infrequently, they originate or terminate at out-of-the-way places where the railways may have only meager facilities. That the railways are able to handle such specialized emergency traffic in addition to the tremendous load they are carrying on their regular trains is a magnificent tribute to the ingenuity of railway managements and men.

It is a tribute also to the co-operation with the railways that is displayed by the branches of the armed forces which are charged with the responsibility for troop movements.

In recent months, however, military developments have been such as to cause many agencies of the government, as well as private industry, to devote attention to post-war planning, a phase of world economy that is essential if our eventual victory in the field is not to be turned into defeat at home. The railways are doing their share of this post-war planning; therefore, it becomes the dual purpose of this issue to recount not only the marvelous job that has been done and will continue to be done for the duration, but also to take at least a glimpse into the future in order to reveal some of the thinking that is being done in that direction.

In this connection, it is heartening to know, as set forth in a later article, that the railways are not going to submit tamely to the inroads of competition for passenger traffic and to regard the loss of the major percentage of this traffic as inevitable. Instead they are preparing to carry out an intelligent fight for post-war business, by proper pricing, by better rolling stock and physical plant and by better merchandising than ever before.

An essential feature of the job to be done has been the "stretching" of the passenger equipment to its fullest extent. The various means adopted for obtaining ever greater utilization of a practically static supply of passenger equipment under the impact of rapidly increasing traffic are described elsewhere in this issue. The changes adopted to handle the business and the advertising and public relations efforts devised to obtain public understanding have created a situation that is entirely unique in the history of the railway industry.

In addition to shortages in rolling stock, the railways have also faced serious shortages in the manpower necessary for the proper operation of their passenger trains. This latter situation has been particularly acute with respect to dining car crews and in Pullman service, both of which are subjected to constantly increasing pressure from a manpower standpoint, not only because of the drafting of employees into the armed forces, but because of the large demands for sleeping cars and diners in troop movement. Shortages of a serious nature have also developed in supplies for sleeping and dining cars, for the latter have been subjected to drastic food rationing; nonetheless, the commissary departments of the railways and of the Pullman Company have managed to do a fine job in keeping the cars supplied.

Tremendous Traffic Increases

While increases in traffic have been countrywide, the railways in certain areas have been called on to handle far greater increases than others. The following statistics show the tasks that face many of the important passenger-carrying lines:

Boston & Maine: Passenger revenues are now running 45.4 per cent over 1942 and 140.5 per cent over 1941.

Chicago & North Western: For the first eight months of the year in each case, passenger-miles increased 75 per cent in 1943 over 1942, with an increase of only 6.3 per cent in passenger-train miles. Comparing 1943 with 1941, passenger-miles increased 126 per cent, with an increase of only 4.4 per cent in passenger-train miles.

Chicago, Burlington & Quincy: For the first six months of the year in each case, passengers carried increased 22.6 per cent in 1942 over 1941, and 62.8 per cent in 1943 over 1942. Passenger-miles increased 45.9 per cent in 1942 and 178 per cent in 1943, while passenger train-miles increased only 1.6 and 0.9 per cent respectively. Passengers per train increased 43.6 and 168.4 per cent respectively, while passengers per car increased 37.8 and 96 per cent.

Chicago, Milwaukee, St. Paul & Pacific: Passenger revenues in the first seven months of 1943 increased 109.6 per cent over 1942.

Denver & Rio Grande Western: For the first six months of 1943, this railway handled 798,783 passengers, as compared with 252,386 in 1942, an increase of 216.4 per cent. Passenger-miles amounted to 280,656,347 as compared with 100,256,754, an increase of 179.9 per cent. Passenger revenue in the same period increased 188.7 per cent.

Florida East Coast: Passengers handled in 1942 increased 80.4 per cent over 1941, and 112.8 per cent over 1940. In the first six months of 1943, passengers handled increased 163.8 per cent over 1942.

Lehigh Valley: The increase in passenger-miles in 1942, as compared with 1941, amounted to 86.5 per cent. For the first eight months of 1943, this road shows an increase of 104 per cent over 1942.

Louisville & Nashville: Using the average of the years 1935 to 1939 inclusive as an index of 100, the ratio of passengers carried during the first six months of 1943 was 303.4 and of passenger revenues 732.0.

New York Central: In the first six months of 1943, the number of passengers handled (excluding commuters) was 20,918,027 as compared with 13,434,703 in the corresponding period for 1942, an increase of 55.7 per cent; passenger-miles in 1943 totaled 3,727,537,838, and 2,177,587,639 in 1942, an increase of 71.2 per cent. The passenger-miles in the first six months of 1943 are materially larger than the total of 3,508,301,326 for the entire year of 1941.

In the previous record year of 1920, passenger-miles amounted to 5,043,428,858, which total was materially exceeded in 1942, and promises to be nearly doubled in 1943.

Norfolk & Western: This line is handling some 2½ times more passengers than in 1939, while the increases in passenger-miles and passenger revenues approximate 500 per cent.

Northern Pacific: Passenger revenues for the first six months of 1940 totaled $1,688,895; in 1941 they were $2,019,500; in 1942, they reached $3,118,579 and this year they aggregated $7,219,430.

Pennsylvania: In the first six months of 1943 the number of revenue passengers increased 55 per cent as compared with 1942; passenger-miles increased 75 per cent; and passenger revenues increased 62 per cent. These figures are startling enough, but an even greater indication of the tremendous job that is being done is found in a comparison of these 1943 figures with those for the pre-war year of 1939, the last year that was not affected by defense or war travel. In the first six months of 1943, passengers carried increased 159.7 per cent over that same period in 1939; passenger-miles increased 275.3 per cent; and passenger revenues 228 per cent. Although the number of passengers carried in 1943 was 23 per cent less than in the peak year of 1920, the average haul increased from 29.7 miles to 72.2 miles, resulting in an increase of 86.9 per cent in passenger-miles.

Pere Marquette: Passenger revenues are running 90 per cent over 1942.

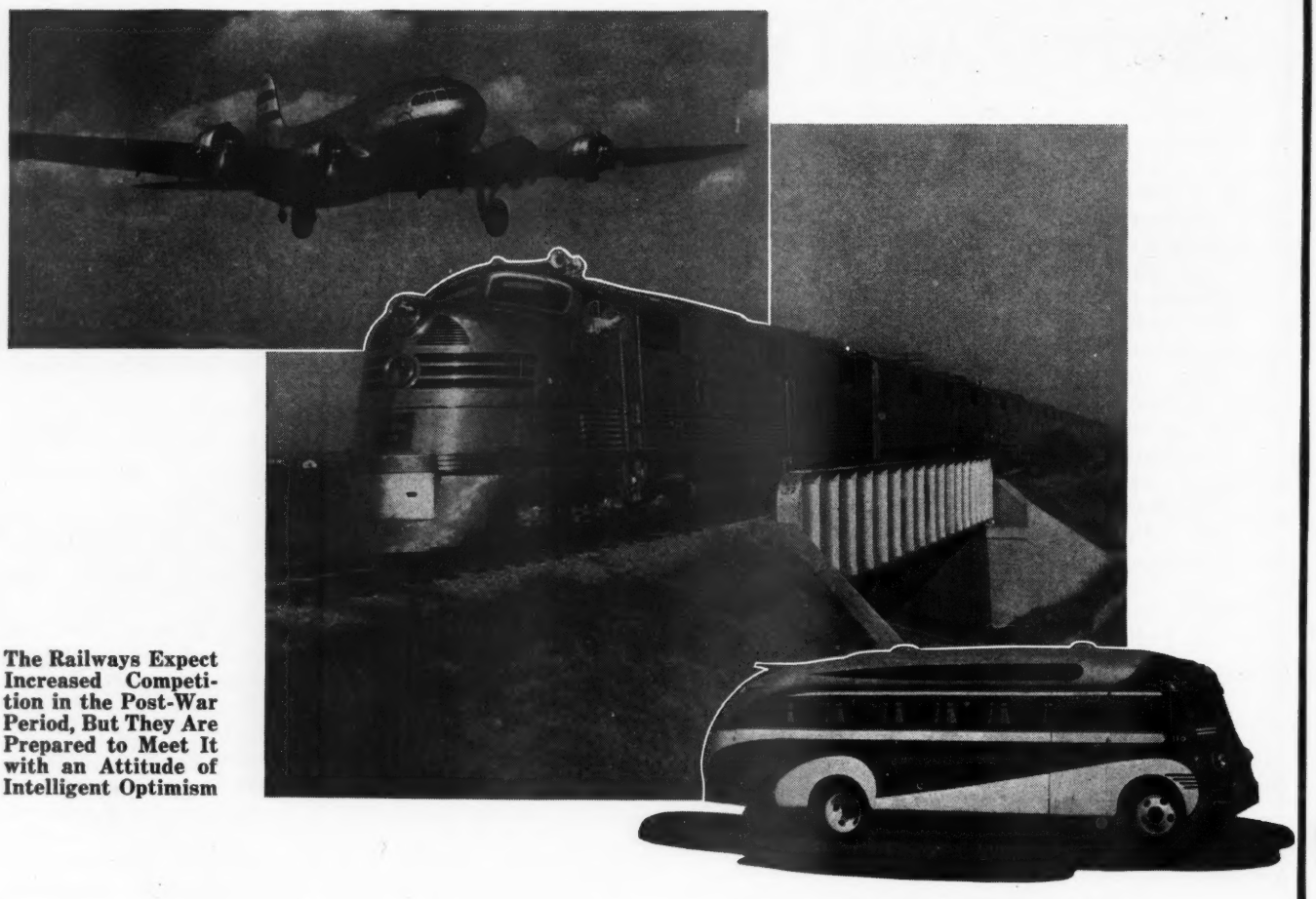
Reading: Local traffic has been showing increases of more than 200 per cent in 1943 as compared with 1938, the increase for July being 269 per cent. In January, 1943, interline traffic showed an increase of 319 per cent over 1938, and this figure has continued to increase, being 452 in July, 1943.

St. Louis-San Francisco: In 1941, passenger revenues totaled about $5,000,000. They were more than $13,000,000 in 1942, and will be about $24,000,000 in 1943.

Southern: This company carried 3,359,116 passengers in 1938, and 10,188,896 in 1942. Passenger-miles totaled 413,392,196 in 1938, and 1,787,627,108 in 1942. In the first seven months of 1942, passengers carried aggregated 4,881,554, as compared with 8,055,082 in 1943. In the same period passenger-miles rose from 843,291,482 in 1942 to 1,447,481,833 in 1943, the average haul per passenger having increased from 172.7 in 1942 to 182.6 in 1943.

Southern Pacific: During the first six months of 1943, traffic increased 374 per cent over 1940. Passenger-carrying car-miles increased 121 per cent and the average number of passengers carried per car increased 113 per cent.

These figures indicate the problem presented to individual railways. The story of the railways as a whole appears in the following pages. It is a remarkable epic of achievement. In addition, this issue presents another important story—what the railways plan to do, and what they should do, to retain much of the present passenger traffic after the war ends.



The Railways Expect Increased Competition in the Post-War Period, But They Are Prepared to Meet It with an Attitude of Intelligent Optimism

Railways Alert to the Necessity of Meeting Postwar Competition

Contemplate new passenger services, higher speeds, modern equipment and lower fares

RAILWAY executive and passenger traffic officers are determined to do everything in their power to hold as much passenger traffic as possible after the War. This unanimity of purpose is revealed through a survey conducted by *Railway Age,* which included interviews with executives and chief passenger traffic officers of those lines handling the largest volume of passenger traffic in the various sections of the country. Moreover, plans are in process of formulation or have already been completed by practically all of these railways detailing the measures to be taken to hold this traffic. Summarized briefly, the following five points represent the practically unanimous opinion of those interviewed:

1. The railways are determined to fight with every weapon at their command to hold as large a share as possible of the post-war passenger traffic. Without minimizing in any way the seriousness of the competition they will face, the railways are optimistic as to their chances of success.

2. The railways recognize that most of their present passenger equipment is out-moded and are planning to replace it with modern lightweight equipment just as soon as possible after the War. Numerous roads plan to buy up to the limit of their financial ability.

3. A majority of the railroads favor a reduction in passenger fares immediately after the War, and would like to make the cut at once, in order to capitalize on the advertising and publicity value, rather than to wait, or to make a series of small reductions.

4. Many railways plan to augment their fleets of coach streamliners materially to add the appeal of frequency of service to the existing advantages of comfort and speed as compared with highway competition.

5. Nearly all of the railways have made elaborate studies and have formulated plans for holding passenger business and the end of the War will not find them unprepared. In some cases, these plans include participation in air transport, if permitted.

Important also is the fact that the railway officers not only plan to supply these new services, but also to sell them to the public much more thoroughly and efficiently than ever before. The criticism that the railways did not merchandise their service properly was advanced frequently in pre-war days and, all too often, this criticism was justified. However, as explained in more detail in another article in this issue, the railways have gained much experience in advertising during the War and this, with other methods of promotion and salesmanship, will aid them in doing a better job of post-war merchandising than they have done heretofore.

What Railway Officers Think about Competition

Railway officers are keenly aware of the acute competition they will face on the highways and in the air after the War. Still, taking all factors into account and knowing of the plans that they have made to meet this competition, a general spirit of optimism prevails among them. Most important is the fact that there is complete unanimity regarding the desirability of initiating those measures that are designed to hold as much of the present traffic as possible instead of waiting until most of it is gone and then trying desperately to win it back. Bitter experience has convinced them that it is much easier to hold customers than to win them back after they have been lost, and the mistakes following the first World War will not be repeated, if present executive thinking continues to prevail.

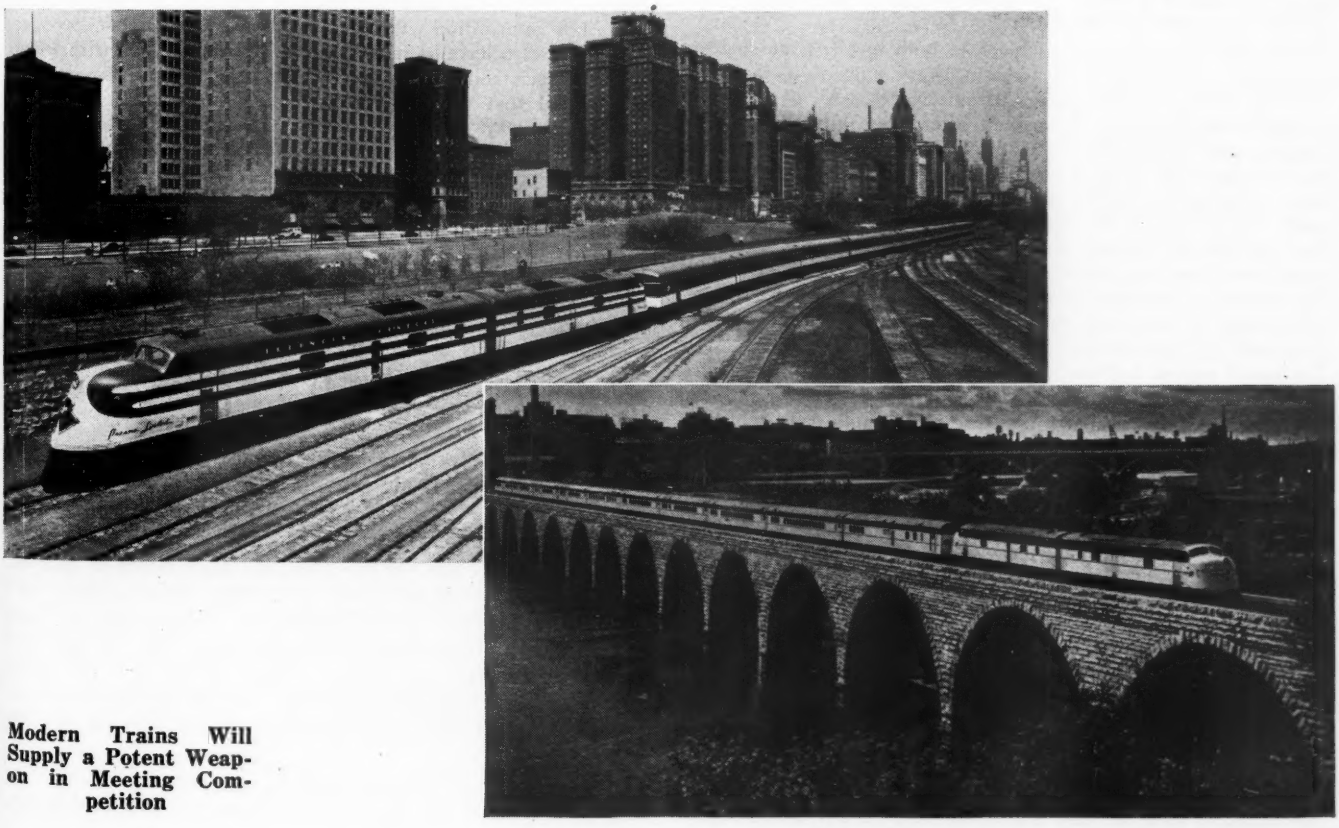
Here is what a number of the executive and chief passenger officers think in regard to competition in the post-war period:

"While I expect that highway competition will make greater inroads into our gross, the airplane will probably make deeper cuts into our net revenues. This is to be expected, but we are by no means resigning ourselves to our fate. In fact, I am growing more optimistic daily as to the railways' ability to remain very definite and important factors in the passenger business."

"We are in a territory that is particularly susceptible to all forms of competition for passenger traffic, including a very persistent boat competition which flourishes in peace times. In the post-war period, we shall certainly see a tremendous increase in plane and highway competition, but, in the course of my talks with fellow railway executives, I have been much heartened by their attitude. Passenger revenues are so vital to us that we have prepared to tackle post-war competition and fight it tooth and nail, but any individual railway would be hampered if there was no concerted effort on the part of all of the railways. Recent visits convince me that there will be such concerted effort and I am convinced that our competitors, who are anticipating a walkover in taking traffic from the railways, are in for a most unpleasant surprise. For some time, and particularly in the last decade, the railways have built up a tremendously more efficient public relations policy that was showing good results even before the War. The War has raised the railways inestimably in public opinion. We must be careful to continue to promote and foster this changed public opinion, so it can be translated into patronage for the railways and be one of our best weapons in meeting competition."

"Surprising as it may seem, we are not particularly worried about airplane competition in the post-war period. On our long runs it would seem that we are particularly susceptible to such competition. Actually, however, the character of our traffic in normal times is such as is not particularly susceptible to airplane competition. The bulk of our travel in normal times consists of retired people going to California for the winter, plus vacation travel in the summer and in neither case are such people inclined to use airplane service because they are in no particular hurry. I look for much more difficult and vexing competition from the private automobile. This presents some problems that are incapable of solution, but at the same time we have proved in specific instances that we can compete with the private automobile on a profitable basis and, by an extension of these means in the post-war period, we are confident that we shall be able to continue to supply the mass passenger transportation of which only the railroads are capable. I am not minimizing the effects of post-war passenger competition. The plane, the bus and the private automobile will made inroads, but on the whole, in view of the greatly increased population brought about by the industrialization of the Pacific Coast, I am confident that we can hold our own in the post-war period."

"We were suffering materially from airplane competition prior



Modern Trains Will Supply a Potent Weapon in Meeting Competition

to the War, and I do not expect it to be much worse in the post-war period, because I hope to be able to combat this competition with streamlined trains and am confident that we can hang on to a considerable share of the business. We have proved that we can meet bus competition if the proper service is offered on the railway and our plans comprise the extension of this service over the system."

"Our railroad is going to face a materially stepped-up competition in the post-war period. No one who has studied the situation can view the prospects complacently or plan to stand pat. Despite all this, I view the future with optimism and with hope. It will be a fight, but I enjoy fights and, from all I can learn, most of the pessimists in the passenger business have changed their tune and are planning to offer competition that will be just as unpleasant a surprise as possible to our competitors through the improvement or complete revision of railway passenger service. The brains of America's railway passenger men were just as good as those of their competitors, but they had been stupefied by the appalling spectacle of steadily and rapidly declining revenues. I know that the spectacle of my railway's passenger revenues dropping from $37,000,000 to $8,000,000 a year within a decade or so didn't help me any. I still maintained, though, that there was nothing wrong that a few million dollars increased revenue wouldn't cure and the present attitude of passenger men shows that I was right."

"Drastic Revision" in Service Foreseen

"In this territory we shall be faced with every imaginable form of competition in the post-war period and we are particularly susceptible to the loss of passenger revenues to all of them. Therefore, in this territory (and, I am sure, in the country as a whole), a drastic revision in railway passenger service will be necessary, if we are to hold any of this business. Consider the facts—our territory is full of good roads for the private automobiles. As a transcontinental line, we are particularly susceptible to airplane competition, since, for long distances, the airways can come far nearer to a parity of rates. I have read that, today, the airplane building capacity is four times greater than the automotive productive capacity was prior to the War. In addition, although strictly military planes are unsuited for commercial use, transport planes can be used for this purpose with only minor alterations. Thus we shall be faced with immediate and drastic competition."

"Our line is particularly subject to both airplane and private automobile competition. In addition, every mile of it, including the branch lines, is blanketed with bus routes. All of this competition will be much intensified after the War, but if our railway will take sufficiently radical steps, I am quite confident that we can hang on to a sizeable share of the business we now have. One of the radical departures is to consider the comfort and convenience of the passenger. It may seem strange to describe this as 'radical' but that's the correct term. The railways have been too prone to subject the passenger's interest to the whims of mechanical and operating officers and to the requirements of mail and express schedules. The fact that you can't sell a train under such circumstances has been amply illustrated on our railway. While our trains that are scheduled more or less for the convenience of the passenger are showing huge increases in revenues, one transcontinental train which is scheduled for operating convenience and in the interests of mail and express, still continues to make a poor showing in direct contrast to all our other trains."

"Airplane competition will take a large percentage of railway first-class business, but the private automobile (and, quite conceivably, the private helicopter) will offer the most vicious competition."

"While airplane travel will unquestionably show the greater percentage increase, it is the private automobile which will be the greatest threat to railway passenger revenues in the post-war years. I have been reliably informed that, within a year after the production of war machines is no longer necessary, the automobile manufacturers will be in production of automobiles that will be smaller, lighter, cheaper and with a low cost of operation, in view of their ability to burn high octane gasoline. In addition, automobile touring will be much improved by reason of the construction, not so much of new inter-city highways as of super-highways through the heart of the metropolitan centers. Such through arteries will eliminate what is now a deterrent to touring, namely, the necessary slowing down through cities and towns."

"While I do not minimize the effects of the general air-mindedness brought about by the glamor of the Air Force during wartime, I am not particularly alarmed by the threat of post-war air competition, so far as passengers are concerned. The use of private automobile and buses will afford us considerably more difficulties. I am optimistic as to the future of railway passenger traffic in the four or five years immediately following the War, although I would not care to offer any predictions as to the ultimate outcome. Where airplane competition will hurt the railways is in first-class mail traffic. I am afraid that the bulk of this will leave our passenger trains for airplanes immediately after the War."

"We are going to lose some of our first-class traffic to the airways, but I am sure that by alert, scientific study of the situation, we can meet the threat."

"So long as there were only about 350 passenger-carrying planes in the country, carrying about 20 passengers each, the personalized service created a tremendous sales appeal. When the airways go after mass passenger traffic, they will find this type of selling no longer possible. Already they are tangling with restrictive union rules. I am not saying that they won't take a lot of our business from us, because I am sure that they will, but the utter defeatism in some circles is not going to permeate this railroad if I can help it."

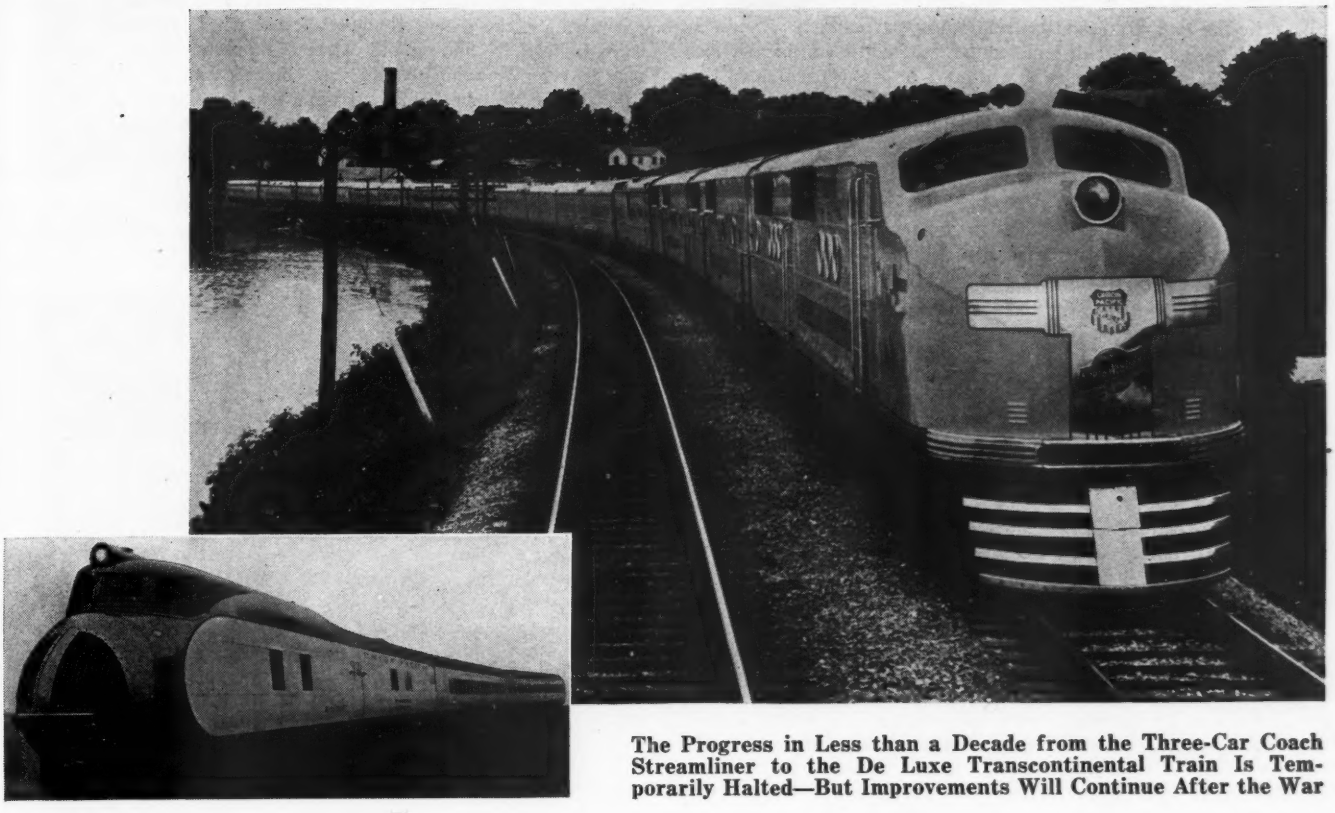
"It is unfortunate, but we feel as the result of careful study, that approximately 80 per cent of our first class travel will go to the airplanes after the War. We have not accepted this situation passively, as passenger business is vital to us—in the period from 1923 to 1929, for example, we earned more net revenue from passenger traffic than from freight traffic. Thus we have not arrived at this conclusion without the most thorough and complete study. Except for a few overnight first-class trains, we expect to lose the bulk of our business men's travel to the airways. We have regretfully come to the conclusion that this is inevitable."

"In the post-war period we will face airplane competition of a severity that it is now difficult to imagine. In addition, the competition from private automobiles will rise to new heights, while bus competition will certainly be as strong if not stronger. If the railways have no money at the end of the War with which to meet such competition, it will be calamitous. However, it is essential that the entire railway organization face whatever competition may be in store for it, either passenger or freight, with resourcefulness and courage and that railway officers and employees do not emerge from the War with a conviction that they are licked before they start. Such an attitude of defeatism would probably be worse than any competition which the railways may have to face. A railway is judged (in my opinion wrongly) by the type of passenger service which it renders. We have denuded our railway of passenger service at many points and are thoroughly ashamed of having done so. It is impossible to measure what this has cost us in the way of larger judgments and damage suits, adverse litigation, short hauling of freight, and in other ways, but I do know that we became very unpopular in many places as a result of this policy."

Comfort, Speed and Fares

In normal times the railways can offer far more comfort and luxury than is possible on either buses or planes. Many railway officers feel that very definite improvements are possible in train speeds. Nearly all of them are of the opinion that passenger fares will be reduced immediately after the War. These factors are all being given close scrutiny by railway officers today as is indicated by the following excerpts from the interviews with these men:

"The comfort of railway travel in peacetime so far exceeds that of the plane, the bus or the private automobile that this



The Progress in Less than a Decade from the Three-Car Coach Streamliner to the De Luxe Transcontinental Train Is Temporarily Halted—But Improvements Will Continue After the War

feature should be stressed. We can and will make our trains comfortable and this applies to all our service, from the local all-coach train to the extra-fare trains. Striking innovations will be possible, for progress has been stopped for the duration. The relatively gradual advance in train comfort between 1934 and 1941 received much favorable attention. The still more spectacular improvements to come will, I believe, cause more favorable comment and public reaction in the way of ticket-buying. Proper pricing will, of course, be a necessity. I am convinced that fares must come down, although I have not yet made up my mind as to the proper figures. We fixed a maximum speed of 100 m.p.h. for our streamliners before the War and I do not think that this speed will be exceeded in the post-war period. However, by improvement in our head-end operations and by continuing to take out curves, I believe that our schedules can and should be shortened from what they were in the pre-war days."

Favors Lower Fares Before War Ends

"We cannot hope to stand pat on our present fare structures. Fares must be reduced and I ardently hope that they will be lowered immediately, before the railways empty their trains by incorrect pricing. The improved metallurgy coming out of this War will make possible light weight with the utmost in comfort and I look for an immense improvement in the speeds with which railway trains are operated. One reason for this is that, in my opinion, head-end business will be reduced so drastically by plane competition that the time spent at stations can be curtailed."

"Streamlined day trains have proved to my satisfaction and that of my associates that in comfort and speed we possess distinct assets for retaining a satisfactory volume of passenger traffic. We intend to exploit these advantages to the utmost in the post-war period by extending such services over all the important lines of our railroad."

"I am somewhat undecided with regard to fares. It seems to me that our present coach rate of two cents per mile is about right, but this opinion may well be subject to drastic revision when I see what our competitors are going to do in the way of fares. So far as transcontinental travel is concerned, speed is particularly important. We have plans for increasing the speed of all our trains. This serves two purposes. It increases the desirability of rail versus bus travel and diminishes the advantage the planes have with respect to speed. Our mechanical department has plans well under way for increasing the comfort of our trains."

"We shall have to reduce rates after the War and do it quickly and thoroughly. Any dawdling and delay will only result in emptying our trains again and in the loss of the highly desirable public relations and advertising value that an immediate and voluntary slash would bring. A tremendous increase in travel occurred immediately after the last war and we made the grievous mistake of slapping it in the face with a 20 per cent increase in fares in 1920, with the result that we literally drove people off our trains into the laps of our highway competitors, which, until then, were a struggling and comparatively insignificant factor in passenger transportation. As soon as the War is over, I want to restore our high-speed transcontinental schedules and improve on them if possible, as well as to make a general improvement in the speed of all our main-line trains. We also plan to add 'glamor' to our coach trains, in an attempt to make them as attractive as possible for mass transportation."

"Fares should be cut to the bone as soon as the War is over. Moreover, a common base rate should be established throughout the country. The present impossibly complicated passenger tariffs should be simplified and the present passenger accounting methods should be 'streamlined.' These measures in themselves should save enough money to permit lowering of fares. The present snail's pace of our trains will have to be improved—by days, not merely by hours. These, plus additional comforts, are necessary if we are to hold any of our passenger business."

"I believe we should reduce rates to 1¼ cents per mile and first class rates to 2¼ cents per mile immediately. Price is one of the outstanding advantages the railways have over their competition and this weapon has never been utilized fully in the past, largely because of inaccurate ideas of cost brought about by the fact that, by the peculiar system of railroad accounting prevalent in this country, passenger service continues year after year to have to bear the brunt of past mistakes. Since the horse and buggy days, no railroad has needed passenger stations every few miles; yet this and other similar mistakes continue to be charged against passenger service and produce distorted cost

figures. Speed is, of course, an important consideration and the schedules of transcontinental trains particularly should be reduced. Speed is also an important factor with semi-local trains. I can envisage such trains that would be money-makers; they would stop only, say, every 75 miles along the main line and be day runs, giving many local communities fast schedules by connecting with the fast through trains. Local business along the main lines is by no means a dead issue and with proper price, speed and comfort it can be made to pay."

"The railways must supply low cost, high speed and maximum comfort to hold post-war passenger traffic. Coach fares should be reduced to one-cent per mile universally. Nibbling at fares will do no good and the railways will again find their trains empty unless they make this radical but dramatic and appealing slash in their passenger fares. It should be made at once, not only for its publicity value, but also to keep the people on our trains. Speed is a potent weapon against competition and by speed I mean an overall schedule of at least 70 m.p.h. Nothing less will suffice and the railways which do not wish to build up their tracks to permit such speeds might just as well get out of the passenger business."

"The railways should begin a study of the rate situation now, so that they have a competitive rate structure to work with after the war. We need lower passenger rates to meet post-war competition. These's no use making our previous mistake of hanging on to high rates until our trains are empty. We have shown that we can far surpass our competition in comfort; there are still undeveloped possibilities in passenger train speeds, but we must have our 'package' priced right to meet competition."

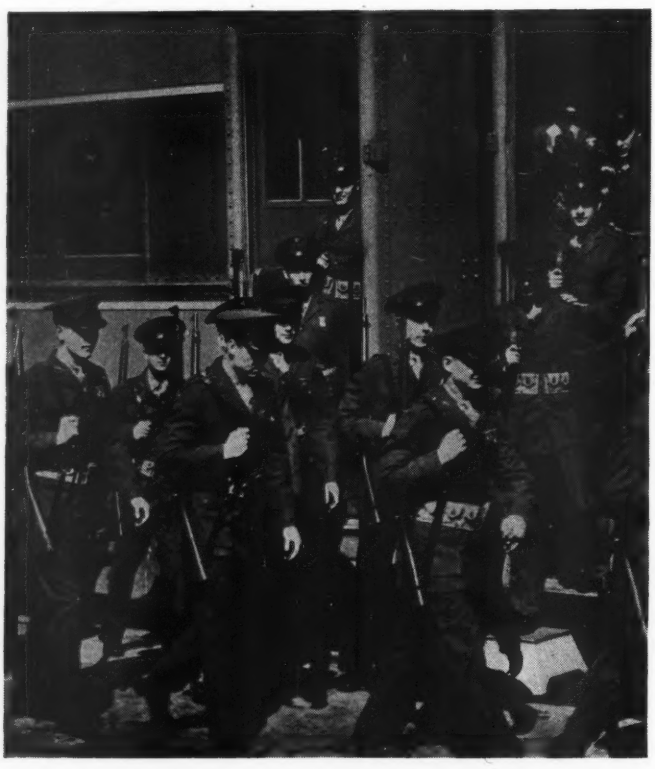
Improved Pullman Cars Will Help

"Passenger rates must be slashed for the post-war period. Our pricing program must be set up well in advance. Cost is still a factor with most travelers and it is one of the few weapons that we have against airplane competition. In comfort, the open-section Pullman car is as extinct as the dodo. No more of them should be built, as they are definitely outmoded. If we can get new 24-roomette cars, with the roomettes priced at present lower-berth rates, the occupancy factor will be so high that we can afford to cut our first-class rates and have the two-edged weapon of price plus comfort with which to combat competition."

"Proper pricing is still the answer to highway competition. Also, some manufacturers of equipment and specialties proceed too much on the theory that they know what the public ought to have instead of finding out what the public wants. The post-war traveler is going to have his choice of media of transportation and he will be 'in the driver's seat,' so far as getting what he wants. I strongly favor standardizing equipment to reduce costs, but let's get the standard that the passenger wants instead of what some designer thinks he ought to have. As for Pullman service, all open-section cars should be scrapped."

"Passenger fares will have to be so adjusted, immediately after the War, as to attract mass transportation. This must be done at once; we must not wait until our trains have been emptied by wrong pricing before taking adequate steps. Higher train speeds than ever before are definitely indicated for the post-war period. Our mechanical engineers are now working on improved coaches that will supply the utmost in comfort."

Attractive Ticket Offices Foster Traffic



Potential Customers of Tomorrow

Post-War Equipment

Large expenditures for modern passenger equipment will be made, according to the railway officers. They feel that most of the present equipment will be worn out and is, in any event, outmoded. The thinking of several of them in this respect is given below:

"The reaction of the public to streamlined trains has been so favorable during the War as to prove embarrassing, since we have standees on all our coach streamliners where seats are not reserved. Everyone on this railway is unreservedly in favor of lightweight equipment for passenger trains. We will never buy another heavy-weight car."

"We have a large number of lightweight, streamlined coaches, but, because we have not seen fit to operate them in named and advertised streamlined trains, we have been widely criticized as a backward railway that is not geared to the modern tempo. In the post-war period, we will rectify our mistake and give the traveling public what it wants—streamlined trains and plenty of them."

"Public favor towards streamlined trains continues unabated during the War. We plan to exploit this attitude of the public to the fullest extent possible as soon as we can get the necessary equipment."

"The reaction of the public to streamliners has been astonishing. The earnings of one of our trains have risen to over $9 per train-mile; all reservations on several others are sold for

the next six weeks; another train has more than doubled its earnings. I have never heard anyone suggest that we go back to 'standard' equipment on this railroad. We are all definitely 'lightweight-minded'."

"Our fleet of streamlined trains has been highly successful during the War. Our streamliners proved successful in meeting airplane competition before the War. We plan daily departures of these trains and with this frequency of service, we can give the airplanes a run for their money, particularly since we hope to remove the extra fare. Moreover, on daily schedules, these trains will not have to be as big as the present ones, which will facilitate station handling and permit increased speeds. We plan also to increase our investment in lightweight streamliners on other parts of our railway to a large extent. I shall recommend this as strongly as though I were spending my own money."

"All new passenger equipment on this railway will be streamlined and lightweight. My conversations with other passenger executives lead me to the belief that, as soon as the War is over, the carbuilders will be swamped with orders for this type of equipment."

The Railways Do Not Anticipate Empty Stations in the Post-War Period

Lightweight Trains Will Be Needed

"We do not now have any lightweight equipment on our line, but I am an ardent advocate of its use and we certainly will have to have it in the post-war period unless we wish to be forced out of the passenger business entirely. To compete properly with the air lines, we shall have to run trains of high-speed, lightweight rolling stock for mail and express alone and a fleet of streamliners intended for passengers."

"The lightweight, streamlined train is the only answer, so far as equipment is concerned, for holding post-war passenger business. This was proved in peace-time, it has been proved in wartime."

"We are confident that, in our fleet of streamliners, which will undoubtedly be increased when it is possible to buy passenger cars again, we have a part of the answer to how to retain passenger traffic. If we were able to build up a satisfactory and profitable patronage on these trains in the depth of the depression, as we were able to do, we should be able to hold our own despite the inroads of competition, but it will require ingenuity and the utmost in research and study of the possibilities for greater comfort and luxury as well as higher speeds to answer this problem. Even under the present conditions of uncomfortable travel, the streamliners are continuing to attract favorable comment and to show larger proportionate increases in traffic than standard trains. We are thoroughly sold on the public appeal of streamliners."

"In peacetime as in wartime, the results attained through our streamliners have convinced us that this is the type of train the public wants. When the war is over, we are going to convert our service to this type of equipment just as rapidly as money and the speed of manufacture will permit."

"The public reception of the streamliners has convinced us that the coach streamliner is a most effective means of meeting highway competition. Our plans include a marked expansion of this type of train."

"We have long viewed with envy the roads who could purchase new streamliners. We did the best we could with rebuilt equipment, but I hope that we have enough money after the War to buy new streamliners—plenty of them, as they are the answer to the passenger traffic manager's prayer."

"The public reaction to streamliners has convinced us that these trains are the answer to retaining our mass transportation business. We envisage fleets of coach streamliners at frequent intervals."

"We are sufficiently convinced that the factors of comfort and speed are so important that at the end of the War, as fast as we can do so, we will replace all of our conventional equipment with modern cars, we will operate passenger Diesels on far more of our trains than we do now and it is not beyond possibility that we may be able to compete even in local service by means of certain types of new trains which we have been studying."

Railways Aggressive and Hopeful

Practically every railway consulted has committees at work studying the situation and analyzing the travel habits of their present and potential customers. Several of the railways have worked out complete plans of what they will do as soon as the War is over. In other words, the railways are preparing to meet competition when it comes. They are by no means unaware of the seriousness of that competition and they are not deluding themselves by minimizing it. Still, a spirit of optimism prevails as to their ability to meet it by modernizing their passenger service and by merchandising it in a manner not heretofore attempted.

Passenger Trains an Indispensable Weapon for Effective Warfare

The men who are in the best position to know testify to the magnificent job being done

THE astounding record made by the railways of handling more passenger miles than ever before in their history, is keyed directly to the all-out effort the nation is making for victory. Moreover, it is one of the most vital steps in insuring that victory. Germany is suffering now from the plan of her "master-minds" to subordinate railway to highway development and her ultimate defeat may be attributed to the failure of her railways (assisted in such failure by our own Flying Fortresses) to stand up under the job of supplying transportation during a long war.

Meet Demands "in Their Stride"

In this country, the railways have been called upon to handle the personnel of the armed forces on long journeys, not infrequently involving transcontinental hauls of 2000 to 3000 miles. They have had to build up their organizations to a point where such unusual and frequently urgent demands upon them can be handled in their stride. Thousands of special trains have had to be operated at a time when regular passenger and freight traffic has climbed to unprecedented heights. It is fitting that the magnificent job they have done under the circumstances should be recognized by outstanding representatives of their biggest customers; the men who, above all others, are in position to realize the good work that has been done and its vital importance to the nation's welfare.

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From the Army

By Major General Charles P. Gross,

Commanding, Transportation Corps, Services of Supply, U. S. Army

A striking illustration of the results of the truly fine co-operation between the railways and the Transportation Corps has been given in the last few months. Until then, passenger equipment of both the railways and the Pullman Company was slowly dwindling and there were no replacements.

At the same time, the number of troops to be handled was increasing. Faced with this situation, the Transportation Corps and the railways, with characteristic co-operation, sat down together around a conference table to solve the problem.

The whole answer could not be supplied merely by building new equipment, since priorities on materials and other difficulties stood in the way of that easy solution. Actually, however, 1,200 sleeping cars and 400 kitchen cars, intended exclusively for troop movement, were ordered and are now being delivered. The sleeping cars are triple-deck and they lack some of the luxuries of standard Pullmans, but they are a far cry from the "quarante hommes—huit chevaux" cars of unpleasant memory of the last War, and they do insure a comfortable night's rest for the soldier.

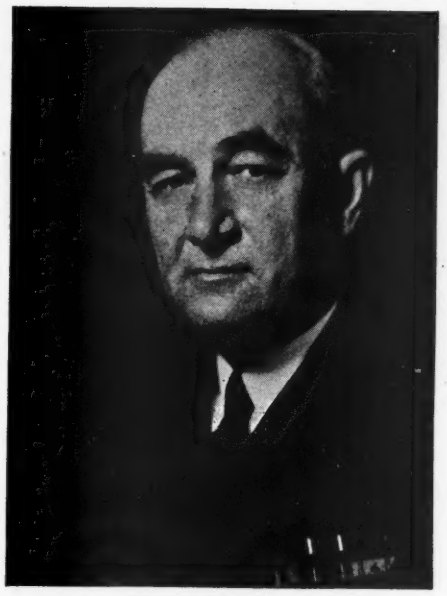
Careful study and co-ordination of troop movements had, meanwhile, brought about a very high degree of efficient utilization of existing equipment, but, to meet

Major General Charles P. Gross

fully the problem of increased demands, we needed to do still more in that direction. While it is the function of the Transportation Corps to handle troop movements and not to decide their military expediency, it was within our province to explain our problem to those with whom that responsibility rests. Their response has been most gratifying. Of course, there are times and places when troops must be moved fast, regardless of cross-haul movement of empty cars or any other than strictly military considerations.

There are many other occasions, however, when such urgency is not necessary, and it is in these latter cases that we have been able to pick up a great deal of slack. Many thousands of miles of empty movement of troop cars are now being saved monthly.

During the last year, the railways have continued to keep up their splendid record for efficient troop movement. If the railways continue as they have in the past —and I am certain they will—this important phase of the war effort will be well handled.



Rear Admiral Randall Jacobs

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From the Navy

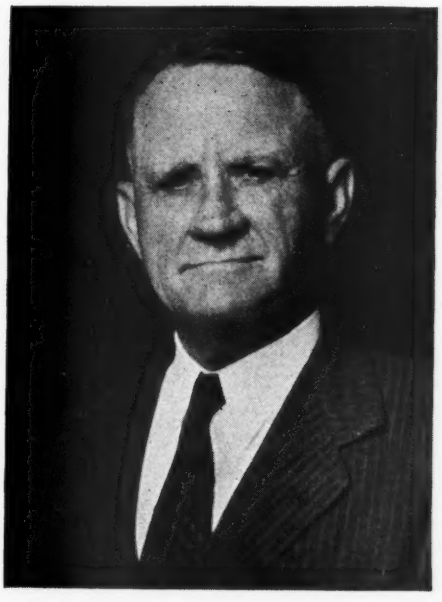
By Rear Admiral Randall Jacobs,

Chief of Navy Personnel,
U. S. Navy

Navy personnel necessarily spends a good deal of time on land, and a sizeable portion is constantly on the move on railway trains somewhere in the United States. The men of the Navy are essentially specialists and, in a global War such as this one, the needs of the Fleet are such as to require a great deal of transcontinental travel. Then, too, the Navy's training centers not only fringe our extensive coast line but dot the interior of our country as well. Travel between these training centers and the domestic naval bases is very heavy.

Thus we have been in a position to make great use of railway passenger transportation and to study it at first hand. Our experience enables us to say unqualifiedly that the railways are doing a fine job in moving the officers and men of the Navy, the Marine Corps and the Coast Guard. Not the least encouraging feature of this close relationship has been the co-operation of these arms of the service with the railways and the spirit of helpfulness and assistance that has always been displayed in return.

It is an outstanding achievement to have supplied our Navy, Marine and Coast Guard personnel with the best passenger transportation of any of the warring nations of the world. Getting such personnel from place to place, often on journeys lasting many days, in comfort has been a potent factor in keeping the morale of the American service man at its high level. Whether traveling on orders or going home on leave, the members of our armed forces are entitled to the best transportation we can give them.



Commissioner J. M. Johnson

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For the Public

By J. Monroe Johnson,

Interstate Commerce Commissioner

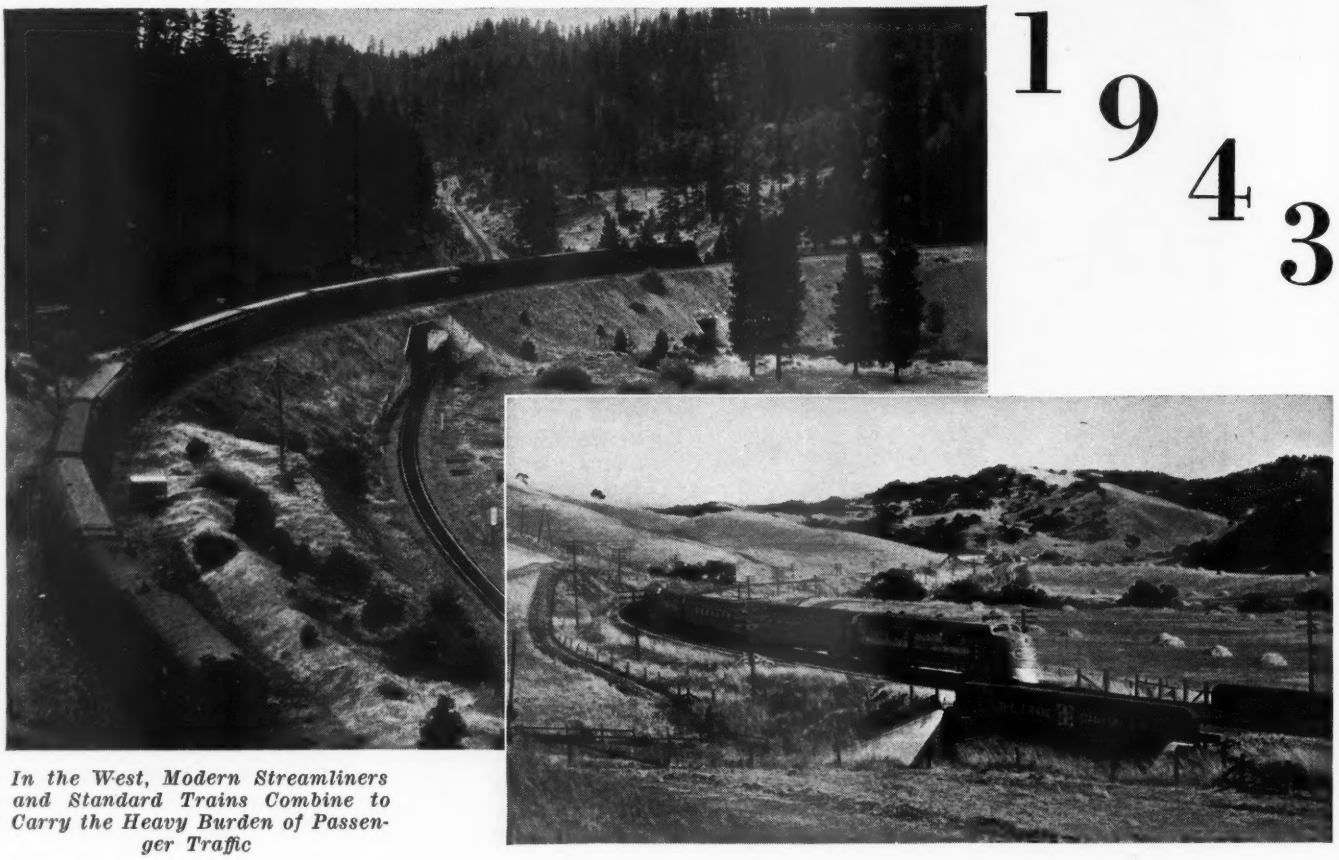
The general public has shown a remarkable understanding of the railways' problems in handling present-day passenger traffic. It is only right and fitting that it should because, today, travel falls into several distinct categories and the first of these is the movement of the armed forces under orders. This is the prime responsibility of the railways to their country, so far as passenger train operation is concerned. As one who, during the last War, had considerable experience in moving troops both here and abroad, this phase of operations seems to me to be infinitely better than it was in 1917 and the railways are to be congratulated for the job they have done. I have every confidence that they will continue their good work. The second important classification is furlough travel. The morale of our soldiers is high. It must be kept high. Visits to the home town, within reason, are morale builders of the highest order.

Then comes essential civilian travel. If some genius could define just what is "essential" civilian travel, perhaps the railways' task could be lightened by travel rationing. Since no one has been able to come forward with any such definition, I'm afraid we are as far from travel rationing as are the British, who have been in it longer than we have and who, proportionately, had greater demands placed on travel than we have. The railways have done a good job in discouraging travel. It was a difficult task to change age-old habits of mind from aggressive sales policies to aggressive patriotism and a complete metamorphosis has not yet, in fact, been brought about in every instance.

Still, the railways deserve all the praise we can give them for the manner in which they have handled the vital troop movement. They have also done a splendid job in the handling of civilian travelers, but, with an overall knowledge of the transportation system, and viewing my job as one of the public servants conscientiously, I must repeat: "On the railways—war traffic comes first."

We have the best passenger service of any of the warring nations. That is fine and a credit to our railways. I hope that they can keep it up but it is not vitally essential. We can get along with much worse passenger service if we have to, in the interests of a speedier return of what we are all striving for—the American way of life.

1943



In the West, Modern Streamliners and Standard Trains Combine to Carry the Heavy Burden of Passenger Traffic

An Unprecedented Passenger Year

American railways break all records in handling the traveling public

THE number of revenue passengers carried one mile on the railways of this country will reach the astonishing total of 80 billion during 1943. This figure is so unparalleled and astronomical as to require comparisons before its vastness can be realized even by those accustomed to dealing with railway statistics. In 1920, the previous record year until 1942, the comparable figure for the twelve months was 46,847,534,000, which full-year figure was exceeded during the first seven months of 1943, when 47,950,173,000 passenger-miles were produced. In 1942, passenger-miles for the year amounted to the all-time high of 53,675,562,000, a figure that will be increased this year by more than 50 per cent.

If all of this had been accomplished with a parity of equipment, the feat would have been remarkable; what actually happened was that this tremendous business was handled with a drastically reduced supply of passenger cars, as compared with 1920. At the same time, about half of the total Pullman cars and a third of the railway-owned coaches were devoted entirely to troop movements and, while cars in such movements do produce passenger-miles, the vagaries of this traffic require far more empty mileage than for cars engaged in regular daily service on assigned runs.

The Decline in Equipment

On January 1, 1920, the Class I railways and the Pullman Company had 41,733 passenger-carrying cars in service, whereas, on January 1, 1943, the available equipment of this character had declined to only 27,922 cars. This decline was, of course, attributable to the decrease in passenger traffic. In 1926, the railways spent $58,000,000 for passenger cars, while in 1927, $54,000,000 was spent. By 1933, this total was down to $2,000,000. With the advent of the streamlined train, expenditures increased to $12,000,000 in 1934 and they have been above that figure ever since.

In the 17 years from 1926 to 1942 inclusive, the railways spent $456,320,000 in capital expenditures for passenger-train cars, but even this large expenditure was insufficient to maintain the supply, as is indicated by the following table, showing the new passenger-train cars installed in the 11 years from 1932 to 1942 inclusive, together with the cars permanently retired in the same period:

Year	New Cars Installed	Cars Permanently Retired	Net Loss
1932	58	1,345	1,287
1933	7	2,081	2,074
1934	270	2,318	2,048
1935	225	2,075	1,850
1936	159	988	829
1937	576	842	266
1938	275	1,009	734
1939	209	790	481
1940	154	754	600
1941	297	587	290
1942	273	838	565
Totals	2,503	13,627	11,124

These figures portray strikingly how the amount of passenger equipment has dwindled. They also show that, even in years when passenger train cars are at a premium, between 600 and 900 cars must be retired because of damage in accidents or because they are completely worn out, since these were the only reasons why passenger cars were retired in 1941 and 1942.

Doing Much with Little

From these figures of traffic and equipment, the magnitude of the passenger transportation problem today may be realized and there is no indication of a let-up in the immediate future. The only way that the huge traffic can be handled at all is by a far more intensive utilization of such equipment as is available than has ever been believed possible heretofore. This is done in part by increasing the seating capacity of all sorts of cars, such as lounge and club cars and other types to permit increases in the average number of passengers handled per car. In order to obtain more mileage per car, layover time has been cut to the bone. In fact, in order to service cars quickly and get them back in service, some railways have organized "commando" squads of coach cleaners who do this work in an extremely short period. Other roads, particularly the Pennsylvania, have adopted successfully the expedient of traveling coach cleaners, who clean cars while they are in service en route, thus cutting down the work necessary in the coach yard, or eliminating entirely the necessity of taking the cars to the coach yard. The S. P. has placed a coach porter in each two cars to keep the cars clean en route and a trash bin is provided in each car in which are deposited the trash bags which are issued to passengers who are eating in their seats.

To increase the car capacity, many lounge and club cars have been converted into coaches. In addition, on the Reading and the R. F. & P., among other roads on which the traffic is extremely heavy, the partitions between the coach and baggage sections of combination cars have been removed and benches have been installed lengthwise in what was the baggage compartment, increasing the seating capacity materially by this means. Such benches are, of course, used only by passengers making relatively short trips.

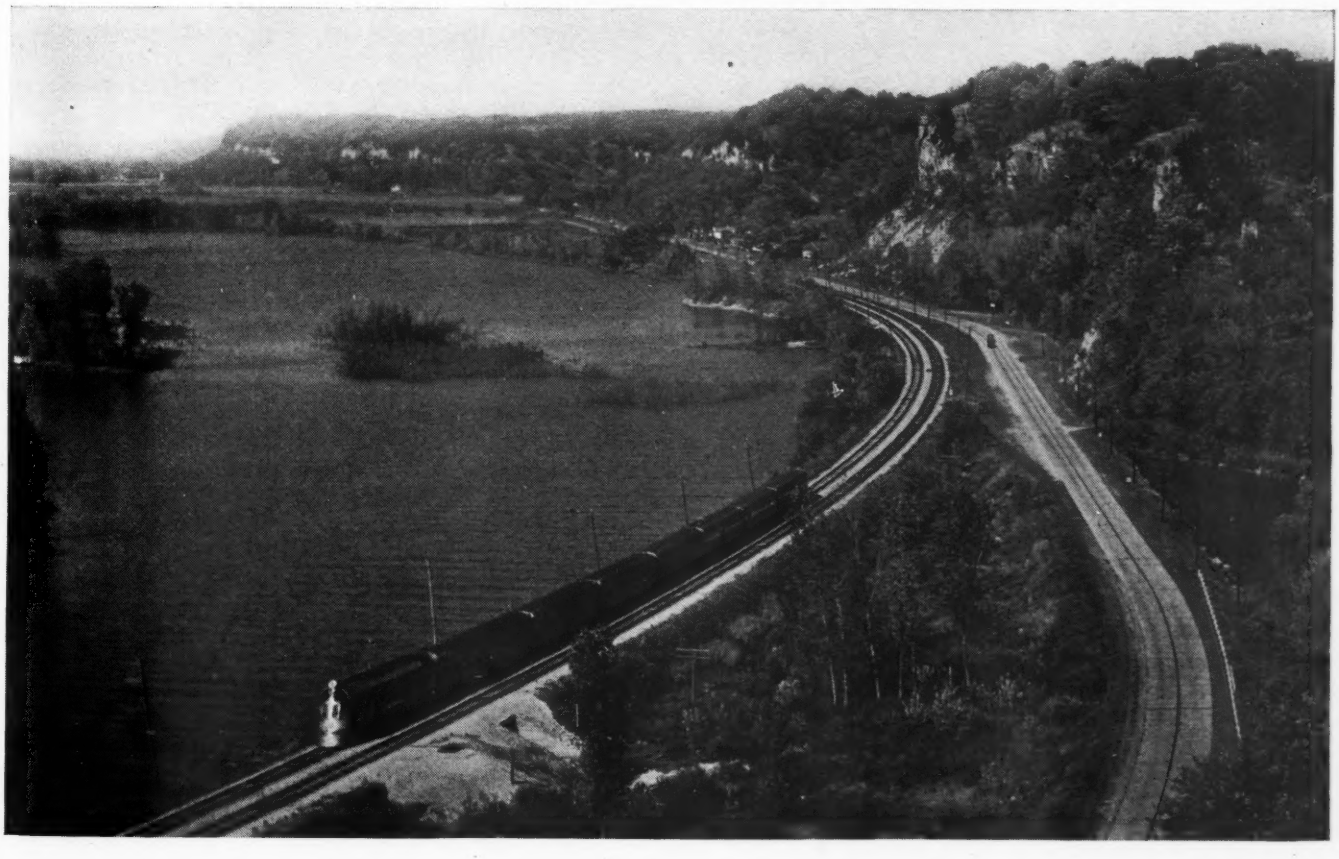
Supplementing the efforts put forth by the individual railways, the A. A. R., through the Passenger Car section of the Car Service division, has undertaken general supervision of some phases of the effort to procure greater utilization of passenger cars. At present, there is an average of 3,300 railway passenger cars per day on other than owner roads. The Passenger Car section checks the movement of these cars closely, assesses penalties for misuse when necessary and acts as a clearing house for the switching and empty mileage charges that may accrue. It also locates special types of cars for unusual express shipments and its field representatives ride trains and check coach yards to insure that passenger cars are handled with the greatest efficiency.

The Section has made a special drive to secure the transfer of equipment from less essential to essential service. Between January 1, 1942 and October 1, 1943, the following passenger equipment was released from less essential service:

Steam locomotives	196
Other locomotives	18
Rail-motor coaches	45
Head-end cars	144
Coaches	412
Parlor cars	79
Sleeping cars	247
Club, lounge and observation cars	117
Diners	61
Other passenger train cars	9

Another of this Section's activities has been the combing of the country for equipment running on branch lines. that is suitable for main line service and which can be

Trains Packed to Capacity Parallel the Country's Deserted Highways



Winter Will Add to the Railway's Passenger Train Problems

replaced by less modern cars that are adequate for branch lines but not as suitable for main line use. By this means, for example, 98 coaches have been transferred to the Southeast where they were badly needed, in lots of one or two from railways in other sections of the country. Another activity in which the Passenger Car section has been helpful is in finding cars suitable for workmen's trains to and from large war plants.

Pullman Operations

With nearly half of its fleet of 7,000 cars constantly engaged in group troop movements, the problem of handling civilian and independent military travel in sleeping and parlor cars has given rise to many complications unknown in peacetime. Pullman passenger-miles are running just over two billion per month and it is expected that the total will reach 25 billion or more for the year 1943, a figure which will be 31 per cent above the all-time high record of 19 billion passenger-miles established in 1942. Passenger travel in sleeping and parlor cars is showing a tremendous increase, the use having been 95 per cent heavier in 1942 than in 1941 and it is still continuing.

When it is considered that inter-city railway coach travel increased 93 per cent, while bus travel increased only 51 per cent and domestic air-line travel remained at about the same level, the importance of the railways and the Pullman Company in wartime passenger transportation can be realized. One reason why this increase could be handled under the circumstances is that Pullman cars are now traveling 41 per cent more miles per car per day than they did in 1917, during the last war. Also, the occupancy per car is about 30 per cent greater.

The Pullman Company is continuing its program for the education of the railway ticket sellers and reservation bureau personnel. Meetings have been held in many cities, which have included the showing of a sound-slide film, in which the jobs of the personnel mentioned are evaluated in terms of their contribution to the war effort. The Pullman Company has also assisted in increasing the available railway coach space by the sale of a large number of lounge, observation, club and parlor cars to the railways for conversion into coaches. In all, it is estimated that some 35,000 seats have been added to the passenger capacity by these means.

O. D. T. Activities

The Office of Defense Transportation has policed the inauguration of new trains or additional cars on existing trains and has assisted in many other ways. On November 19, 1942, the O. D. T. began what it described as a "nation-wide drive to keep the American public at home." Director Eastman has supervised the continuation of this campaign throughout the year. Appeals to government agencies not to grant leaves for holiday travel have been generally effective. The O. D. T. has also discouraged meetings and conventions, except those vitally necessary to the war effort.

As a result of Mr. Eastman's conferences with professional baseball executives, the long spring training trips to California and Florida were eliminated and the schedules of the clubs during the regular season were so adjusted as to reduce travel to the minimum. Similar measures were taken to reduce travel involved in many other amateur and professional sports. The customary hundreds of special cars operated for the Kentucky Derby, for the Army-Navy football game and hundreds of other sport spectacles have been conspicuous by their absence this year. A saving of nearly 70,000 miles, or 69 per cent, in travel by football teams was set as a goal for the 1943 season, and this goal is being reached. This is, of course, not the only saving, as loyal alumni and other enthusiasts always accompanied the teams in large numbers during these trips. Several of the teams which ordinarily made transcontinental journeys each year abandoned their schedules entirely in 1943. The train travel of professional football teams was reduced by 700,000 passenger-miles, or 37 per cent, in 1943, as compared with the already restricted schedule of 1942. Coaches were also used instead of sleeping cars on many of the remaining trips.

A vigorous campaign was also conducted to discourage vacation travel. Starting vacations in mid-week was urged and adopted by many large industries. Many press

releases were issued on the subject of spending the vacation at home, or, at least, going to one place and staying there instead of visiting several places. Radio broadcasts were also used in this campaign.

In a relatively small number of cases, the O. D. T. has ordered railways to discontinue the operation of certain trains considered as non-essential. The fact that only a few such orders have been necessary and then only because local opposition tied the individual railways' hands, is indicative of the efforts made by the railways themselves.

Getting the Most Out of Cars

There are thousands of examples of how cars are utilized to a far greater extent now than heretofore; the following will show the methods employed. By the revision of dining car runs, each of the larger railways has managed to feed its patrons and, at the same time, release from one to five diners for use on troop trains. The fact that dining car service is supplied at all is amazing, when it is considered that, in England, for example, only 70 of the 700 pre-war dining cars are still in operation.

Of the many examples of savings made by doubling and pooling equipment, two will suffice to illustrate the method. The Burlington operates six trains daily between Omaha and Kansas City, each requiring at least two coaches, while four require three coaches. These services formerly required 20 coaches daily, whereas, through revised operations, only 13 coaches now provide the same service.

Where it is essential that equipment lay over several hours, many roads now use it for other services during the interim as the occasion demands. Train No. 5, of the Florida East Coast, for example, arrives at Miami, Fla., at 5:30 p.m., and its equipment goes out on Train No. 6 at 11 a.m. the following morning. On week-ends, this equipment is used as a special furlough train to give soldiers at southern Florida camps additional week-end service.

The Alton and the Illinois Central entered into an arrangement last May, which has released two sleeping cars daily for troop movements or other service by means of which their Chicago-Springfield sleepers are now operated on a staggered basis, with the Alton handling them for two months and the Illinois Central for one month alternately.

The total of railway passenger-miles for 1943, given at the beginning of this article, is so startling that it will bear repetition here—80 billion miles! That, of itself, seems incredible. Still the railways have accomplished the colossal task and they are prepared to continue to supply the overwhelming majority of the railway passenger transportation. The American railways still supply by far the best and most comprehensive passenger service of any of the warring nations. With continued public co-operation and understanding, they will continue to accomplish the impossible.

The Astounding Total of More Than Eighty Billion Passenger-Miles Will Be Piled Up by the Railways This Year

Special Squads of Car Cleaners See to It That Trains and Cars Spend Little Time in the Coach Yard

Attacking the Problem of Volume

Railways adopt numerous innovations to cope with the unprecedented movement of traffic

RAILWAY passenger service in this country is far better than in any other warring nation. Admittedly, it is nowhere nearly as good as the public and the railways themselves would like it to be, but the fact remains that through cheerful co-operation on the part of the public and hard work and ingenuity on the part of railway officers and employees, the unprecedented traffic is being handled. Many trains are uncomfortably crowded, they are frequently late, the dining cars are no longer first-class restaurants, with elaborate menus, and much travel these days is attended by discomforts and inconveniences that are unknown in peace-time. At the same time, an unprecedented number of people are being handled on passenger trains and vital troop movements are being handled smoothly and efficiently. This splendid achievement is made possible by improvements in operating practices to get the utmost utilization of the passenger equipment that is available, as described elsewhere in this issue and further, by an amazing variety of changes that have been effected to assist in handling the passengers from the time they purchase tickets until they leave the railway station at their destination.

New Ticket Office Practices

Fortunately, the ticket office modernization program that was an accompaniment of the revival of passenger traffic that was brought about by the inauguration of the streamliners, had progressed sufficiently far that many of the important lines had provided large, commodious uptown offices in a number of cities. The drain of the armed forces and other factors on the ticket office personnel has been heavy, as a large percentage of the ticket sellers were of draft age. Also, the business of selling tickets, particularly under present passenger tariffs, is a highly involved and complex procedure at times and it has not been easy to replace the ticket sellers. However, many railways established schools for ticket clerks and the graduates of these schools (consisting largely of young women) are now filling many of these jobs. In addition, a large number of men who were formerly employed in solicitation and other work in off-line agencies have been called back into on-line ticket offices to fill vacancies.

At the same time, the issuance of tickets has been simplified by the provision of a larger number of interline forms and by having tickets printed for many more destinations, thus avoiding much of the laborious process of filling out blank forms by hand. Among other roads, the New York Central has discontinued the use of the auditor's stub on multiple route and blank destination tickets, the ticket agent's stub being sent to the auditor and returned to the ticket office when the necessary accounting has been done.

The Southern has taken cognizance of the large amount of government travel by simplifying the ticket agency and accounting office procedures on government transportation requests. This system materially reduces the amount of work necessary for the issuance and recording

of tickets, and its ramifications were described in detail in the *Railway Age* of March 27, 1943.

After some negotiation, the I. C. C. permitted the New York-Washington roads to change their New York-Washington and New York-Philadelphia fares so that the amounts involved end either in 0 or 5 when the tax is added. This has relieved ticket office congestion to some extent and has speeded up the collection of cash fares on trains.

Meanwhile, plans have been devised to relieve ticket sellers of as much report making and statistical work as possible. Another move in the direction of having ticket sellers concentrate on selling tickets is the provision of information clerks and, in some cases, floorwalkers, in city ticket offices to separate those who have come in for information from those who wish to buy tickets. All of these plans have improved city ticket office procedure, but still there are many offices where there is a constantly milling crowd on the public side of the counter, demanding attention in and out of turn. To relieve this situation and to bring about more orderly ticket selling, several offices have put in the numbered card system for patrons. Under this plan, the prospective traveler, on entering the office, takes one of a series of consecutively numbered cards from a rack and, when his number is called, steps to the counter. This has avoided much of the congestion formerly experienced at such offices.

Terminal and Station Ticket Offices

Of course, much of the simplification in ticket selling described above has had its effect in speeding operations at station ticket windows as well, but many other devices peculiar to station ticket selling have also been tried in the larger terminals. The desired objective is to reduce the size of the lines waiting before each ticket window and this has been done effectively in many cases, particularly at the busy Washington terminal. Increasing the number of ticket sellers and ticket windows was an obvious step and it was taken at once, but there is a physical limit to this type of expansion and it did not solve the whole problem. Accordingly, separate ticket windows were set up to sell coach tickets only, others to handle commutation tickets, still others to sell sleeping car space, and handle sales to military personnel.

At Washington special windows have been added to handle the sale of tickets on government transportation requests and, at certain periods of the day, wickets are set up for the sale of tickets from Washington to Baltimore only. Meanwhile at Washington and many other terminals, floorwalkers constantly patrol the ticket lines, weeding out those in the wrong lines and directing them to the right windows. Other features of terminal passenger handling have been the establishment of a far greater number of information booths and setting up windows for the sale of tickets for the next train only.

To facilitate ticket sales further, the Pennsylvania has installed in Philadelphia and Newark ticket vending machines similar to the pari-mutuel machines used at race tracks.

The machine is equipped to issue tickets to a number of suburban destinations and tests indicate that this can be done much more rapidly through the use of a machine.

Many Plans Have Been Adopted to Solve the Problem of Overloading Dining Cars

This segregation has served a dual purpose in that the sale of tickets is speeded up materially, while, at the same time, ticket sellers can be educated more quickly by the schools for, obviously, it takes less training to sell only on-line coach tickets than to sell all types of tickets.

The nation's passenger stations have become a sort of combination hotel, club and general gathering place for a large segment of the population. This has been particularly true so far as the armed forces are concerned and the railways, in conjunction with the U. S. O. and other agencies, have done a remarkable job in supplying recreational and other facilities for service men. In Washington, for example, the sumptuous waiting-room formerly held in reserve for the President and his distinguished guests is now the exclusive bailiwick of Private John Smith and his buddies. Also, in a number of stations, uniformed

Many New Methods Are Used in Handling Passengers Through Large Terminals and in Station Ticket Selling

personnel are admitted to the trains in advance of civilians.

In so far as possible, the comfort and convenience of the general public have also received attention. The station modernization program that was already under way before the war has been continued, notably in such places as the St. Louis Union Station. Dining, seating and other facilities have been vastly expanded. In some stations, the first of which was the B. & M.-M. C. station in Portland, Me., news broadcasts are tied in with the station loud speaker system at regular intervals. One of the greatest tributes to the railways is the orderliness of the stations under present crowded conditions. The railway police have accomplished much in preventing disorder.

Reservation Bureaus

Except via telephone, the traveling public does not penetrate into the maze of charts, diagrams and switchboards that forms the reservation bureau. Still, the load on these bureaus has increased proportionately more than in any other phase of ticket selling and they have had to be expanded as the volume of work grew by leaps and bounds. Taking the Southern Pacific bureau in San Francisco as an example, 50 persons were normally employed, whereas the present staff is 120. Here, too, a division has been made and four sections handle separate operations, as follows:

1. Military
2. Government agencies and war industries
3. Other civilian traffic
4. General information

Among many other roads, both the Pennsylvania and the New York Central have given particular attention to the proper staffing and operation of these reservation bureaus and, when the complexity and the volume of the work is considered, the railways as a whole have done remarkable jobs in avoiding duplicate sales and other mix-ups.

Thus, tremendous amounts of thought and effort have been necessary to handle the ever-increasing volume of passenger traffic properly and efficiently through the somewhat complicated process of getting people on to the trains with their tickets in proper order. The provision of enough cars to handle them is dealt with in another article, but certain features of present day train service will be described here.

By any previous standard, railway dining car service today is poor, but there are few complaints about it, because, when present conditions are considered, and the poor service in all restaurants is taken into account, today's dining car service really becomes a remarkable achievement. The railways suffer from a shortage of dining cars because of the demands for supplying food to the troops en route. There is also an acute shortage of manpower, not only to staff the cars, but also in the commissary department. Finally, food rationing has been applied as stringently to dining cars as to individuals; far more so, in fact, since the average amount of food allowed dining cars per person per meal amounts usually to less than one ration point.

The dining car situation has reached such a crucial stage in the West that, on many long-distance trains, only breakfast and dinner are served, the noonday meal being provided by a box-lunch served at the passenger's seat. Box-lunch "bars" on wheels have also been inaugurated by the New Haven at various stations, to meet the needs of passengers who do not wish to face long waits for train dining service.

Women in Dining Service

The manpower shortage on dining cars is being solved to some extent by the employment of women. The S. P. has some women cooks on its dining cars and the Pennsylvania has conducted a successful experiment in the use of colored waitresses. By careful selection, several efficient crews of girls have been secured. Nearly 350 colored women are now employed on diners as waitresses, pantry girls and fourth cooks. The success of the experiment has led some other roads to employ colored waitresses also.

Apart from the many dining cars employed exclusively in troop train service, the feeding problem en route is further complicated by the movement of smaller groups of military personnel under orders on regular trains. It is the general practice to feed such men before the general public is admitted to the dining cars and this is one reason for congestion and long waiting.

To speed service, the menus are being very much restricted, passengers are being urged to leave the cars as soon as they finish eating and liquor is no longer served

on diners before or after meals, to eliminate any encouragement for the passenger to dawdle over his meal while others are waiting. By and large, the patient civilian traveler gets fed and is supplied with an astonishingly good meal, considering present conditions.

The feeding of military personnel other than on troop trains has been accelerated by the issuance of a simplified military meal ticket, which does not require the somewhat complicated certification and handling that was formerly necessary. This materially reduces the time involved in accounting, both on the diners and in the general offices. The Denver & Rio Grande Western has also simplified meal service to troops on regular trains by converting lounge cars into "trailer" diners. These cars are equipped with counters and 52 stools. The food is brought from the regular diner kitchen to steam tables in the trailer and served from there.

Reserving Coach Space

The Pacific Coast supplies the best example of crowded passenger trains, although certain other areas run close seconds. On the S. P., conditions reached a point where overcrowding demanded action and a train assignment plan for coach passengers was made effective on the Pacific Lines on July 16, 1943, under which the train seating capacity is closely adhered to and no seats are sold in excess of such capacity. This plan has attracted nationwide interest. The practice of reserving coach seats has been in effect for some years on many trains; however, the S. P. plan does not reserve seats, but merely limits the number of tickets sold to the number of seats on the train. Under the plan, no assignment of space is made except as passengers present themselves at the ticket offices. To take care of men in uniform, specific percentages of space are set aside for them on each train. Each ticket office receives a definite allotment of seats for each train and when this is gone, it does not telephone to other ticket offices but stops the sale for that particular train. The space allotted to each ticket office is watched carefully and changes in the allotment are made frequently as traffic indicates. The plan does not apply to passengers in through coaches coming from other railways, or on certain trains where coach seats have been reserved for years. It applies only to the larger stations and not to most intermediate points, where passengers board the train without assignments.

Many objections were advanced when this plan was announced and practically all the problems, except additional manpower, have been encountered. The system has involved the employment of only 5 additional supervisors and 12 ticket clerks. Since the inauguration of the plan, coach traffic has dropped about 10 per cent, but the remaining passengers get a comfortable ride, trainmen can work the train much faster and more easily and there is much less station congestion. The press, realizing the necessity of some such plan, has been extremely fair in its comments. Actually, it was a difficult plan to inaugurate and even more difficult to operate for the first few weeks, but a recent study on the ground indicates that the extra work involved in making the plan operative was well worth while and that passengers and railway men and officers alike are favorably inclined toward it, as offering a solution to a condition that was fast becoming intolerable.

Public Good Will

Relatively, many fewer complaints are being received now than in the days when railway passenger service could be adapted to the whims and needs of the individual. There are few people who do not realize the splendid job the railways are doing under severe handicaps. There is no indication of any reduction in the flow of passenger traffic for some time to come and it is not to be expected that the railways will be able to improve the service appreciably until the load lightens. Because of the splendid manner in which the public has recognized the handicaps under which the railways are laboring it is vitally important that railway officers continue their efforts unabated and do not permit themselves to fall into careless habits for these are reflected immediately in their employees. The latter have, on the whole, come through a time of long-continued stress and strain magnificently, but neither officers nor employees can afford to antagonize a good-natured public by adding unnecessarily to their discomfort.

Ticket Office Accounting Procedure Has Been Simplified in Many Instances

Streamliners Now Operate on a Strictly Utilitarian Basis

Luxury features abandoned in all-out effort to supply maximum service

FOR the duration, America's streamliners, those once glittering queens of the rails replete with every luxury and convenience that the ingenuity of designers could devise, are engaged in the business of handling as many passengers as possible. Moreover, they are handling a disproportionately large percentage of the total traffic, since their fast schedules have a distinct appeal to the men in the armed forces who wish to make every minute of their furlough count, and to civilian travelers on essential business, which is nearly always urgent. As a result, the streamliners, as a whole, have contributed a far greater amount to the total effort than their comparatively small numbers would indicate. In fact, it is highly probable that, without the addition and contribution of these trains to the nation's passenger capacity, today's tremendous volume of traffic could not be handled at all. In wartime, as in peace-time, the streamliners continue to make a strong appeal to the public, but they have now been converted to strictly utilitarian purposes and have joined the ranks of other, more prosaic trains in the vital business of aiding in handling the nation's wartime passenger traffic.

A cursory glance at the earning figures for these trains is quite sufficient to indicate that they offer a strong and convincing answer to the postwar competition for passenger traffic. Most of these trains are now earning from 200 to 300 per cent more than their pre-war standard, which, in itself, was considerably higher than the contemporary earning capacity of the so-called "standard" trains. As one railway executive expressed it recently, in discussing postwar competition: "the streamliner is the answer to the passenger traffic manager's prayer."

At the time of the last Passenger Progress issue (November 21, 1942), the streamliners had already been converted to handling as much of the nation's passenger business as possible and they have continued in this type of service since with relatively little change. Such further changes as have occurred are recorded in the following paragraphs and are reflected in the accompanying table which portrays the present situation of the nation's streamliners.

During the year a number of streamliners were put on somewhat lengthened schedules, in order to provide for the exigencies of wartime operation. On February 7, 1943, the extra-fare on the Broadway Limited of the Pennsylvania, which had been reduced previously to $3, was eliminated entirely, to secure capacity loadings for this streamlined train.

In June, the "City of Denver" of the C. & N. W.-U. P. celebrated its seventh birthday and the announcement was made that, in that time, the two trains in this service had traveled 5,325,000 miles and had transported 750,000 passengers. Thus, if the streamliners of the Burlington and the Rock Island are also taken into account, it appears that approximately a quarter of a million passengers are being transported annually between Chicago and Denver, two important war production centers, in the fast, overnight service of the streamliners—a most important contribution to the war effort.

Similarly, between 3,000 and 4,000 people are being transported daily between Chicago and the Twin Cities on the streamliners making those runs. Traffic on the Milwaukee's four Hiawathas alone is up about 60 per cent, which means, for example, that, during August, an average of 1,862 people were handled daily by the Hiawathas.

The Rock Island's fleet of Rockets has shown a remarkable performance record. The Peoria Rocket, a 4-car train, had carried 1,024,043 passengers by September 19, 1943, upon completion of six years service. The Des Moines Rocket, also four cars, at the end of six years service had carried 822,018 passengers.

A further indication of the good work of the stream-

The Nation's Streamliners

Railway	No. of Trains	Name of Train	Normal Consist	Placed in Service	Operated Between	Daily Mileage Per Train
Alton	1	Abraham Lincoln	12	7- 1-35	Chicago-St. Louis	568
	1	Ann Rutledge	12	7-26-37	Chicago-St. Louis	568
A.T. & S.F.	2	Super Chief	9	(b) 6-15-37	Chicago-Los Angeles	651
	6	Chief	11	(b) 2-28-38	Chicago-Los Angeles	743
	2	Kansas Citian	6	4-17-38	Chicago-Oklahoma City	851
	1	Tulsan	5	12-10-39	Kansas City-Tulsa	512
	2	Golden Gate	6	7- 1-38	Oakland-Bakersfield	626
	2	San Diegan	9	3-27-38	Los Angeles-San Diego	512
	2	El Capitan	7	2-22-38	Chicago-Los Angeles	651
A.C.L.-F.E.C. (d)	3	Champion	14	12- 1-39	New York-Miami	700
B. & M.-Me.C.	1	Flying Yankee	3	4- 1-35	Winter schedule undetermined	
C.&E.I. (f)	1	Dixie Flagler	7	12-17-40	Chicago-Miami	970
C.&N.W.	2	Twin Cities 400	11	(b) 9-24-39	Chicago-Minneapolis	419
	1	Peninsula 400	9	1- 8-42	Chicago-Ishpeming	775
	1	Green Bay	6	1- 8-42	Chicago-Green Bay	585
	1	Capitol 400	5	1- 8-42	Chicago-Madison	651
	1	Minnesota 400	5	(b) 1- 8-42	Wyeville-Mankato	434
C.N.W.-U.P.	1	City of Portland	12	6- 6-35	Chicago-Portland (g)	805
	2	City of Los Angeles	13	12-27-37	Chicago-Los Angeles	904
	2	City of Denver	11	6-18-36	Chicago-Denver	1,048
C.&N.W.-U.P.-S.P.	2	City of San Francisco	13	6-14-36	Chicago-Oakland	961
C.B.&Q.	1	Mark Twain Zephyr	3	2-15-42	St. Louis-Burlington	442
	1	Pioneer Zephyr	4	3- 8-42	McCook-Lincoln	456
	2	Denver Zephyr	12	11- 8-36	Chicago-Denver	1,037
	2	Twin Zephyr	9	12-18-36	Chicago-Minneapolis	874
	1	General Pershing Zephyr	4	4-30-39	St. Louis-Kansas City	558
	1	Silver Streak Zephyr	4	4-15-40	Lincoln-Kansas City	502
	1	Ak-Sar-Ben Zephyr	8	4-11-40	Lincoln-Chicago	551
(h)	2	Texas Zephyr	12	8-23-40	Denver-Dallas	832
C.B.&Q.-C.R.I.&P.	2	Zephyr Rocket	7	1- 7-41	St. Louis-Minneapolis	585
	2	Texas Rocket	4	4-21-35	Houston-Fort Worth	566
C.M.St.P.&P.	2	Afternoon Hiawatha	15	(i) 5-29-35	Chicago-Minneapolis	421
	2	Morning Hiawatha	15	1-21-39	Chicago-Minneapolis	421
	2	Mid-West Hiawatha	6	12-11-40	Chicago-Omaha (j)	488
C.N.S.&M.	2	Electroliner	4	2- 9-41	Chicago-Milwaukee	425
C.R.I.&P.	2	Rocky Mountain Rocket	7	11-12-39	Chicago-Denver (k)	1,084
	1	Peoria Rocket	4	9-19-37	Chicago-Peoria	644
	2	Kansas City Minneapolis Rocket	3	9-29-37	Kansas City-Minneapolis	489
	2	Kansas City Dallas Rocket	4	11-15-38	Kansas City-Dallas (l)	677
	1	Des Moines Rocket	4	9-26-37	Chicago-Des Moines	716
	2	Choctaw Rocket	4	11-17-40	Memphis-Amarillo	761
G.M.&O.	2	Rebel	4	7- 1-35	New Orleans-Jackson (m)	497
I.C.	2	Panama Limited	9	5- 3-42	Chicago-New Orleans	921
(n)	1	City of Miami	7	12-18-40	Chicago-Miami	995
	1	Green Diamond	4	5-17-36	Chicago-St. Louis	588
	1	Miss Lou	1	11-17-40	New Orleans-Jackson	366
K.C.S.-L.&A.	3	Southern Belle	9	9- 1-40	Kansas City-New Orleans	873
M.P.	2	Missouri River Eagle	6	3-10-40	St. Louis-Omaha	478
	1	Delta Eagle	2	5-11-41	Memphis-Tallulah	518
	2	Colorado Eagle	8	6-21-42	St. Louis-Denver	1,011
N.Y.C.	2	Twentieth Century Limited	17	(b) 6-15-38	New York-Chicago	961
	2	Empire State Express	16	(b) 12- 7-41	New York-Cleveland-Detroit	872
(p)	1	James Whitcomb Riley	8	4-28-41	Chicago-Cincinnati	605
N.Y.N.H.&H.	1	Comet	3	6- 5-35	Boston-Providence	440
N.Y.S.&W.	2	Susquehanna	3	7-15-40	Susquehanna Transfer-Butler	430
Penna.	2	Broadway Limited	8	(b) 6-15-38	Chicago-New York	908
(q)	1	South Wind	7	12-19-40	Chicago-Miami	1,039
Reading	1	Crusader	5	12-13-37	Jersey City-Philadelphia	360
Seaboard (r)	3	Silver Meteor	17	2- 2-39	New York-Miami (s)	1,009
Sou. (u)	3	Southerner	8	3-31-41	New York-New Orleans	924
(v)	3	Tennessean	9	5-17-41	Washington-Memphis	619
	2	Vulcan	2	8-24-39	Chattanooga-Meridian	591
	2	Cracker	2	10-11-39	Atlanta-Brunswick	550
	1	Goldenrod	2	9-24-39	Birmingham-Mobile	528
	1	Joe Wheeler	2	9-29-39	Oakdale-Tuscumbia	497
S.P.	2	Sunbeam	6	9-19-37	Houston-Dallas	264
	2	Coast Daylight	20	3-21-37	San Francisco-Los Angeles	470
	2	San Joaquin Daylight	20	7- 4-41	Oakland-Los Angeles	479
	2	Lark	20	(b) 5- 1-41	San Francisco-Los Angeles (t)	470

(b) Date lightweight equipment was installed instead of heavy on an existing train.
(c) Handles sleeping cars between New York and Florida in summer season.
(d) Full route—Penna.-R.F.&P.-A.C.L.-F.E.C.
(e) Operates between Boston & New Hampshire resorts as the "Mountaineer" in the summer season.
(f) Full route—C.&E.I.-L.&N.-N.C.&St.L.-A.B.&C.-A.C.L.-F.E.C.
(g) Streamlined connection, Portland-Seattle.
(h) Operates over C.&S.-Ft.W.&D.C.
(i) Four new sets of trains on this run since 1935.
(j) Train splits at Manilla, Iowa, one section going to Omaha, another to Sioux Falls.
(k) Streamlined connection operated Kansas City-Belleville and Limon-Colorado Springs.
(l) Also makes round trip between El Reno and Oklahoma City.
(m) Streamlined connection operated between Union and Mobile.
(n) Full route—I.C.-C.of Ga.-A.C.L.-F.E.C.
(o) Train splits at Buffalo, one section going to Cleveland, the other to Detroit, via Michigan Central.
(p) Operates over C.C.C.&St.L., Cincinnati-Kankakee and I.C., Kankakee-Chicago.
(q) Full route—Penna.-L.&N.-A.C.L.-F.E.C.
(r) Full route—Penna.-R.F.&P.-Seaboard.
(s) Streamlined connection, Wildwood-St. Petersburg.
(t) Streamlined connection operated from and to Oakland.
(u) Full route—Penna.-Southern.
(v) Full route—Southern-N.&W.-Southern.

liners in carrying more than their share of the burden is supplied by the Colorado Eagles, operated between St. Louis and Denver by the Missouri Pacific. These trains, ordered before the War, were put in service on June 21, 1942, and, in their first year of operation, they handled 300,000 passengers, divided 202,000 westbound and 178,000 eastbound. In this year they ran 650,881 train-miles and accounted for some 133 million passenger-miles.

The large number of individual lightweight, streamlined cars, ordered by the railways or supplied by the Pullman Company, has not been augmented during the year. Still, these cars have been doing proportionately more than their share, in that, as a whole, they spend less time in the shop than the older cars do and hence are capable of greater utilization.

The appeal of the new trains to the public has not lessened during wartime; in fact, it has increased tremendously, a consideration that is of the utmost importance to the railways in considering what the trains of the postwar period will be like. However, for the duration, the big story on America's streamliners is the utilitarian service they are rendering and their contribution to the war effort in supplying desperately needed passenger carrying capacity.

RAILWAYS
advertise effectively

Institutional copy has replaced bids for patronage—Much more space is being used

THE railways are doing more advertising now than at any time in their history. At first glance, this seems paradoxical, in view of the fact that, particularly on passenger trains, they are carrying capacity loads and, in many sections of the country, have gone considerably beyond what would have been considered a capacity load. Under the circumstances, the railways should not, and actually do not, advertise for more business. However, certain objectives such as campaigning against unnecessary travel and giving advice to those who must ride in trains, are widely advertised and such advertising is proving to be of distinct aid to the war effort. The railways have issued poignant and effective appeals in this regard, some of the best known being the New Haven's "The Kid in Upper 4" and the Southern Pacific's paraphrase of its pre-war slogan "Next Time—Don't Use the Train."

The campaigns have been carried forward by individual railways, by the eastern, western and southeastern railways as groups, and by the Association of American Railways for the benefit of the railways as a whole. The A. A. R. has also given advice in determining the types of advertising to be done by the railway groups. The group advertising has involved such plans as the spacing of the advertising of various roads so that different railways run the same appeal in the same papers on succeeding days. The railways have also adopted an overall slogan which is widely used on individual advertising: "One of America's Railroads—All United for Victory."

The advertising has been notable for the variety of the media used in getting the message before the public. These have included newspapers in cities and towns of all sizes; national magazines; trade papers; pamphlets and radio programs. The themes and character of the advertising have varied widely, but the overall, general note has been directed towards the same goal —to acquaint the public with the tremendous job the railways are doing and to solicit the public's aid in meeting the problem. For many months the advertising has eliminated direct sales appeal; quite the reverse, in fact, as described later in dealing with the "Don't Travel" campaign. The unusually large volume of advertising now being conducted by the railways all comes under the general description of strictly institutional copy.

This institutional advertising is being done in different forms. The Pennsylvania and other railways have tied in the railway with the public effectively by run-

The Railways Are Advertising on a Much Larger Scale Now Than Ever Before


Hardly as Snug as Bugs in a Ru
Boston and Main
ONE OF AMERICA'S FIVE ROADS "ALL UNITED FOR VICTORY"
THE TRAIN THAT CAME FROM NOWHERE
NEW YORK CENTRAL
WOULD YOU LIKE TO TRAVEL 'AXIS STYLE'?
FLORIDA EAST COAST RAILWAY
Were You the cause of This?
CO-OPERATION
LL HELP WIN THE WAR
Burlington Route
THE LAND ROUTE TO "AMPHIBIOUS OPERATIONS"
LEHIGH VALLEY Railroad
Sinews of the South
SOUTHERN RAILWAY SYST
"Hold No. 66"
....TROOP TRAINS GOING THROUGH!
Buy-Buy-Bonds!
Go "Bye-Bye" later....
Rio Grande
HERE'S MY SEAT, SOLDIER
Give Them the Right of Way
EXAS AND PACIFIC RY.
PENNSYLVANIA RAILROAD

ning striking ads of railway families in the armed forces, thus portraying the railways in a personalized fashion; not as "soulless corporations," but as organizations made up of and employing many thousands of plain "John Smiths"—average, patriotic Americans enduring the same wartime problems and sorrows that the rest of the public is forced to endure.

Institutional Campaigns

The railways have also done an effective job in getting the facts before the public as to the essential part the railways play in the daily life of the country and particularly in its wartime phases. This campaign was started in a relatively small way several years ago, but it has received added impetus and has been supplied with even more graphic and attention-arresting copy during the War. The Association of American Railroads has been extremely active not only in its own advertising for the railways as a whole, but also in suggesting themes for individual railway advertising so that the combined efforts might result in a co-ordinated mass appeal. This type of advertising has brought results in improving the public attitude toward the railways. It is successful not only in improving public relations during the war, but also, it will have a beneficial effect after the war, when the railways will again be soliciting business, particularly if such campaigns are continued and intensified in the post-war period, as now seems certain.

Another type of institutional advertising that has been successful in promoting improved public relations is the publicizing of the territory served by the individual railways. The Southern has had an excellent campaign on the subject. Samples of this type of advertising, as well as unusual passenger advertising, are contained in a booklet entitled "An Investment in Post-War Prosperity for the South," which is worth the attention of executives of other railways.

Other roads have pointed out that the railways were prepared to do their wartime job better than almost any other industry, despite handicaps that might well have resulted in chaos in any industry not staffed with as ingenious and efficient officers and employees as the railway industry. The Rock Island, among others, ran a successful campaign on this theme, carried in 175 daily and 400 weekly papers and several magazines, under the caption of "Planned Progress." The Baltimore & Ohio sounded a somewhat different note on the same theme in a series carried in 336 newspapers and 219 cities, with its "Keeping Fit" campaign, showing how various phases of B. & O. transportation were kept fit for action in wartime service.

British Railways Are Also Conducting "Stay Off the Train" Campaigns

The Patriotic Theme

Nearly all of the railways have cleverly combined the romance of railroading with patriotic appeals, ranging from requests that the public leave room on the trains for the soldiers to promoting the sale of war bonds. The universal slogan "One of America's Railroads—All United for Victory" really sounds the keynote of all these campaigns. Some of the most striking appeals are reproduced with this article.

The Milwaukee's striking ad "Let Freedom Ring" also carried out the patriotic theme, the copy starting: "High above the roar and rumble of America's factories at work for war, you hear the bells of freedom ringing on tens of thousands of rushing railway locomotives."

"Don't Travel" Advertising

A sizeable amount of money (the S. P. alone spent more than $75,000) has been spent in an attempt to keep non-essential travel from the trains. Particularly striking appeals and effective slogans have characterized this campaign. Among those that might be mentioned are the following:

"Mother Knows Best," Boston & Maine, urging that passengers not travel weekends.

"Were You the Cause of This?", Florida East Coast, showing a service man who was unable to board a crowded train.

"He's Going On a Mighty Important Trip," Norfolk & Western, showing a soldier fully equipped for overseas duty.

"Buy—Buy Bonds, Go Bye-Bye Later," Denver & Rio Grande Western.

"Don't Plan a Trip This Christmas," Northern Pacific.

"Look Before You Leave," New York Central.

"Here's My Seat, Soldier," Texas & Pacific.

"Co-operation Will Help Win the War," Burlington.

"How's Your Conscience Today?", Southern Pacific.

These were typical of a most striking campaign—a campaign designed to discourage customers, which must indeed be something unique in American advertising history. It is difficult to judge the effectiveness of these campaigns in bringing about the desired result of keeping "joy-riders" off trains. The fact remains, however, that holiday crowds have been uniformly smaller this year than last, and passenger men shudder to think what would have happened, in view of the tre-

A Continuation of Effective Railway Advertising Will Keep These Clerks Busy After the War

mendously increased volume of essential travel, if such ads had not been run.

Wartime railroad advertising has been given great praise by students of advertising, including the Bureau of Advertising of the American Newspapers Publishers Association. This publication issued a book of what it termed highly successful ads and which featured copy run by the B. & O., the B. & M., the New Haven, the S. P., and the combined campaign of 29 western and transcontinental railways.

In another report, the Bureau gave first place, from a readership standpoint, to the Southern's ad: "I'm Tired Tonight—and I'm Proud of It." Two other railways ads appeared among the first ten: "Last Night I Couldn't Sleep," New York Central, and "This, Too, Is America's Strength," Lehigh Valley. The survey indicated that all of these advertisements were read by approximately 50 per cent of readers of the newspapers in which they appeared.

The Inspirational Approach

The Pullman Company, which has carried on a campaign along institutional lines for several years, has intensified and broadened its advertising and public relations campaigns, in a successful attempt to inspire railway and Pullman employees to greater efforts in accomplishing the war transportation program; and in seeking public co-operation in solving wartime transportation problems. In seeking to obtain these objectives, the advertising has been designed to inform the public of wartime travel conditions and advising them how they may co-operate in their own interest in the most effective use of available accommodations.

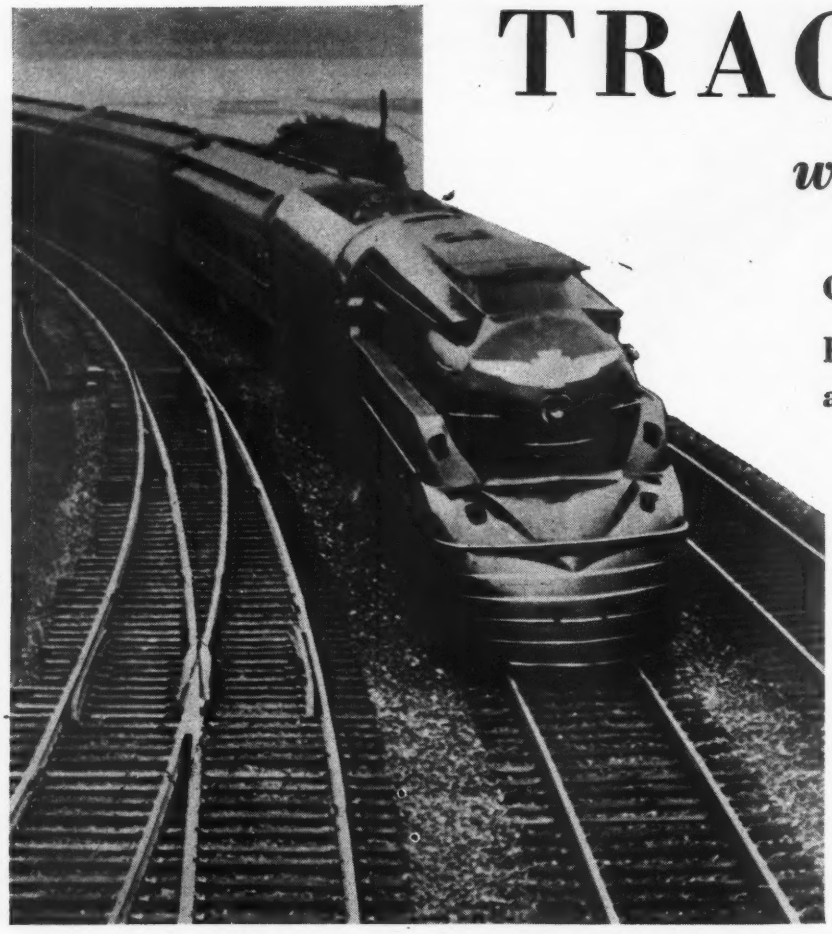
What of the Future?

For many years, the railways were considered, and with some justification, as being among the most laggard industries in America, so far as advertising was concerned. That this is no longer true has been demonstrated in this article. Elsewhere in this issue, the results of a survey of executive thinking on post-war passenger business are given. They show an alert, intelligent optimism and indicate clearly that an all-out effort will be made to hold as much passenger traffic as possible after the war. The survey indicated that new trains, higher speeds and greater comfort will be used to attract the passenger. The survey also indicated that all of these things will be merchandised properly. This will include not only better salesmanship, but also far more effective and voluminous advertising for passenger traffic. The present campaigns have convinced the railways of the effectiveness of advertising. They plan to make far greater use of this potent sales aid after the war than they ever have done before.

TRACK AND

will control the pace

Only to the extent that the fixed properties can be maintained adequately can the railways continue to meet present demands and hope for preeminence in the field with the close of hostilities



On Their Way, With Higher Speeds and Shortened Schedules — War and Postwar — But Only With Tracks and Other Roadway Structures Adequate to Demands

ON every hand, railway engineering and maintenance officers are being commended for the outstanding performance of the tracks, bridges and other elements of the fixed properties of the railways under the loads and difficulties of war-time railway operation. These commendations are highly in order, because these men have done and are continuing to do a remarkable job. However, day after day as the war continues, with steadily increasing traffic demands gnawing at the fixed properties faster than conditions will permit replacements, these men are, themselves, becoming progressively more concerned as to the ability of the fixed properties to continue to keep pace, unless they are relieved from the present inadequate diet of the three essentials to their adequacy—labor, materials and equipment.

Wisely, this growing concern on the part of those charged with the upkeep of the fixed properties is being held under control. Few except those most intimately acquainted with these officers would sense it. In fact, most of the utterances of these men ring with confidence that the job will be done—that their facilities will meet the test. But what is the true situation?

Face Critical Challenge

Railway engineering and maintenance officers are optimistic and confident because they are faced with a challenge such as has never faced them before—a challenge born of a combination of conflicting circumstances that draws heavily upon their determination, loyalty and perseverance, qualities for which maintenance of way and structures men have been known since the earliest days of railroading. Yet these same men, faced daily with cold practical realities, are realists, and know better than anyone else that even the greatest confidence, determination, perseverance and loyalty cannot build or maintain those tracks, bridges, shops, terminals and water and fueling facilities that are essential to sustain all-time peaks in passenger and freight traffic without adequate materials, manpower and work equipment—all three of which, they are short of today.

While they have little to say about the strategy of the war and about the part that they must play, railway engineering and maintenance officers realize full well that rail transportation is vital to the successful prosecution of the war. They know too, that important as is the ability of the railways to meet all demands for freight service—military and essential civilian—there could be no successful war effort, if railway passenger service was allowed to fail; indeed, if in speed, regularity and adequacy, passenger service was not maintained equal to essential demands. These are matters of serious concern to them, because they know that neither adequate war-time freight or passenger service can be continued unless sustained by adequate trackage—main track, branch line tracks, terminal trackage and sidings—adequate bridge structures and adequate roadway, shop and terminal facilities.

While these matters are of immediate concern to railway engineering and maintenance officers because of their direct bearing on the winning of the war, they are also of concern because these men are not unmindful of the heavy responsibility that will rest upon the railways in the postwar period, a responsibility which the railways can discharge only if their fixed properties are adequate to the needs that will arise. The fact that they think of this phase of their problem at this time at all is due to the stark reality that day by day, wear, tear

STRUCTURES

of war and postwar passenger service

and general deterioration are taking a progressive toll of the fixed properties that is not being replaced—that apparently cannot be fully replaced under existing conditions, and that, unless arrested, can bring the railroads eventually to the status of a liability to both the war effort and to the postwar period. That must not happen.

Passenger Service Essential

There are those, uninformed, who think of high-speed, dependable passenger service as a luxury—a non-essential to the war effort. Furthermore, they attribute to passenger service, standards of construction and maintenance far beyond those required for essential war-time freight service. Neither of these is true.

As regards the former, they overlook the fact that since Pearl Harbor, an average of more than 1,100,000 service men in group movements have been transported monthly over the rail lines of the country, not to mention the thousands of military men moved in smaller groups and on furloughs, and the thousands upon thousands of other persons engaged directly or indirectly in the war effort. They also overlook the fact that today, half of the Pullman cars and a third of the coaches of the railways are required for troop movements, not to mention the accommodations required by government personnel and those employed in essential war industries. Railroad commuters in and about the larger cities of the country well know the demoralizing effect that can be brought about by a breakdown in commuter service, but even some of them do not grasp the importance of dependable nation-wide war-time passenger train service, and fail completely to sense the greater demoralizing effect on the country as a whole that could be brought about by a breakdown in that service.

Fortunately, railway engineering and maintenance officers and employees view this situation in its true aspect, and realize that the adequacy and safety of the fixed properties for passenger travel are as essential to the well being of the country as the adequacy and safety of these properties for freight transportation. They know that with many freight trains today operating at the passenger train speeds of only a few years ago, few additional facilities and little additional maintenance are required by even the highest class passenger service, over what is essential for present-day freight train operation. In fact, they know that, as regards the character and amount of materials employed in track construction and maintenance, any track that will handle safely present heavy freight trains at 60 m.p.h., will handle with equal safety the fastest streamlined trains of the country.

High-speed passenger train service, with maximum comfort and safety, does require certain refinements in track construction that are not essential to freight train operation, such as greater refinement in line and surface and the elimination of restricting curvature. In fact, postwar passenger train operation, with higher speeds and shorter schedules generally, will call for large expenditures for curve reduction and this work must be done if the railways are to compete successfully for the postwar passenger travel of the country. However, except where this work can be done without interfering in any way with more pressing current work, it is awaiting the postwar period, and engineering and maintenance officers are throwing all of their energy and available resources into those phases of work that are imperative to war-time operations.

At the time of Pearl Harbor, the track and structures of the railways were in the midst of a comeback from

Bridges Must Be Maintained, Strengthened, or Renewed As Traffic, Speeds and Wheel Loads Require — There Is No Alternative

the prolonged depression period of the Thirties, which witnessed the accumulation of millions of dollars of deferred maintenance. Beginning in 1937, and except for a recession in 1938, expenditures for maintenance showed sizeable increases. As a result, the fixed properties late in 1941 were in better shape to enter the war period than at any time in the preceding eight or ten years. However, the fact that they still embodied deferred maintenance to the extent of many millions of dollars—in rail, in ties, in ballast, in bridges, and in yard and terminal facilities—is a matter beyond dispute.

The disconcerting factor which is causing increasing concern month after month, is that even the status of the fixed properties at the onset of the war is not being maintained—that expenditures for maintenance of way and structures, although increasing steadily, and for the present year running ahead of even the sizeable expenditures of the Twenties, have not kept pace with traffic demands. Today, actual expenditures for maintenance of way and structures (exclusive of depreciation and other book charges), which for the first eight months of the year amounted to approximately $600,000,000, are running more than 100 per cent ahead of similar expenditures in the similar period of 1940. At the same time, however, the railways are now handling 105 per cent more freight traffic and 275 per cent more passenger traffic than in 1940. Adding to the growing spread between the demands on the fixed properties and replacements is the further fact that, to an increasing extent since the start of the war, maintenance expenditures, due to the limited availability of many materials, have not represented to the same extent those classes of work that have been most essential to immediate needs, but rather classes of work that, with the minimum use of critical materials, were best calculated to offset those essential needs. Furthermore, and of considerable importance, due to wage increases, increased material prices, and a general lowering of the efficiency of maintenance of way workers as a whole, the output per maintenance dollar has steadily decreased since the first months of the war. All of these factors combine to paint a picture of steadily enlarging depreciation of the fixed properties, at a time when the demands on them are still increasing, and with only conjecture as to when the strain will be relieved.

Officers Evidence Concern for Properties

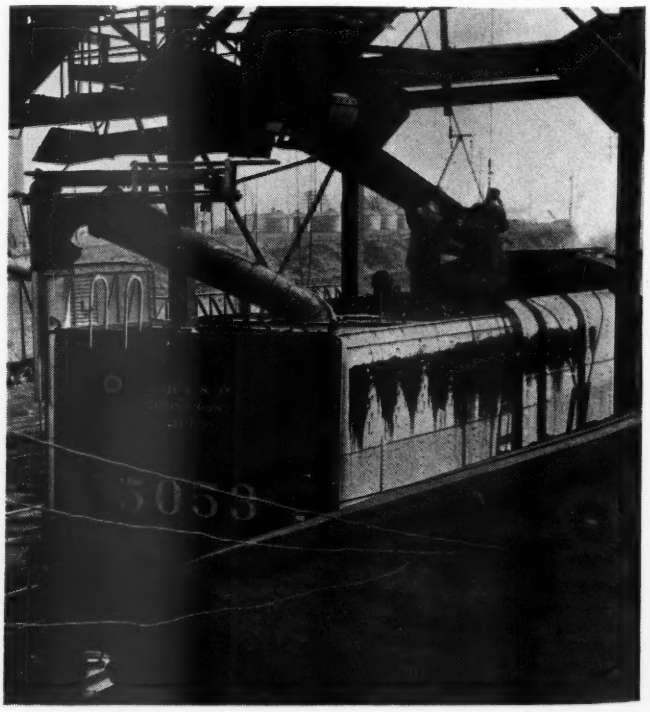
Reflecting this condition in its most serious aspect is the reference to the large increase occurring in train accidents due to maintenance of way and structures, contained in the October 11 "Monthly Comment on Transportation Statistics" of the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission, as follows: "The number of train accidents classified by railway officials as due to defects in or improper maintenance of way and structures increased more rapidly in the first six months of 1943, compared with the like period in 1942, than those assigned to other general classes." The figures accompanying this statement showed that train accidents due to defects in or improper maintenance of way and structures for the first six months of 1943 totalled 1,031, compared with 703 in the first six months of 1942, an increase of 328, or nearly 47 per cent. These figures explain the concern that engineering and maintenance officers are showing about the continued ability of their properties to keep pace indefinitely with the growing demands that are being made on them, unless the present trend can be arrested.

It is a matter of record over many years that, as earnings have increased, the railways have poured them back into the fixed properties to keep pace with demands. That rule holds no less today, and the fact that the railways are not building more back into their properties at the present time is due entirely to their inability to secure the materials and labor to this end. In almost every vital category, the materials required for the current maintenance of the tracks and structures are not available in the quantities necessary. This includes rail, track fastenings, crossties, structural steel, timber, lumber and a wide range of other essential products.

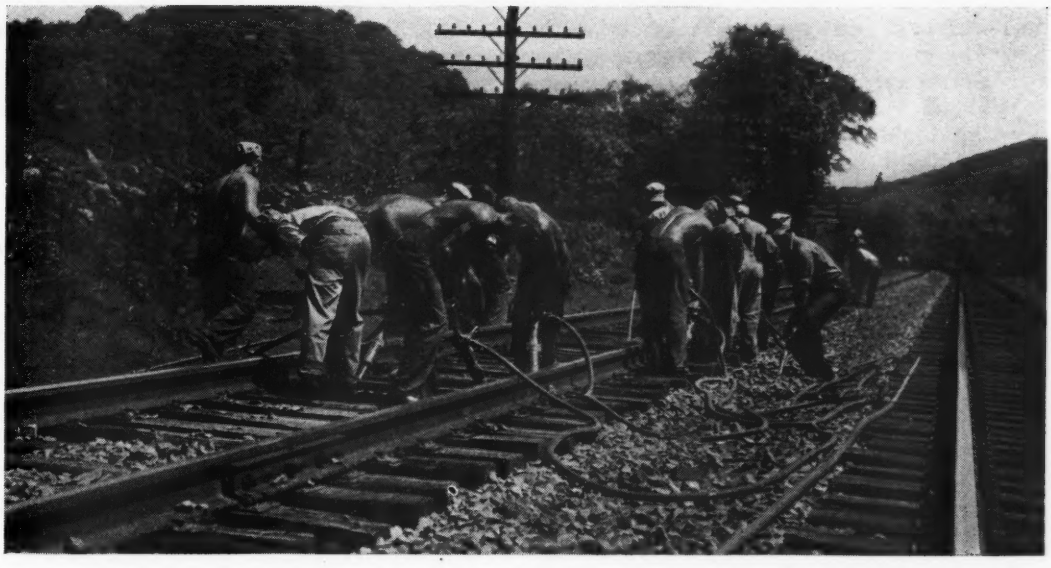
Materials and Labor Shortages

To offset this situation, those in charge of the maintenance of tracks, bridges, buildings and fuel and water facilities continue to stretch out the service life of every class of existing material, are employing second-hand materials for many types of construction and repairs, and are making widespread use of substitutes for those materials that have been made scarce or critical by the war effort. These efforts have already had a marked effect upon the ability of the railways to maintain their essential facilities, and will be continued to the limit to this end, but everyone responsible for the maintenance of these facilities knows that there is a limit to the effectiveness of these measures, and that to go beyond that limit is to jeopardize the very foundation of adequate and safe rail transportation.

Adding to the problem of materials, and today outranking that problem in importance in many areas of the country, is that of insufficient labor. According to recent reports of the United States Railroad Retirement Board, the maintenance of way and structures forces need more than 50,000 additional workers—a situation that has grown increasingly worse since the start of the war, in spite of all effort to the contrary, including the importation of Mexicans, the employment of hundreds of boys below draft age and hundreds of week-end workers, and the broadening of many inducements to hold present employees.



Speed in Refueling and Watering of Locomotives Assumes Increasing Importance in Shortening Train Schedules



Passenger Train Speeds Cannot Exceed Those Permitted by the Standards of Track Construction and Maintenance

Today, with insufficient labor to install even the limited amounts of materials that are being made available for essential maintenance—with hundreds of section gangs undermanned, and many stripped entirely—and facing a winter of increasing demands, it is no exaggeration to say that the situation in many areas is already critical.

Essentials Cannot Be Neglected

Irrespective of the material and labor situations at the moment, or any other considerations, there are certain essentials in track and structures maintenance that cannot be neglected beyond certain definite limits if war-time passenger transportation—indeed, war-time freight transportation—is not to falter and eventually fail. There are differences of opinion concerning the relative importance of each element of the track in attaining an adequate track structure for high-speed train operation, arising largely out of local conditions, but beyond dispute is the necessity for a sound, well-drained roadbed, rail of adequate section and unquestioned integrity, sturdy and reliable rail joints and other track fastenings, sound ties, adequate ballast of good quality, light curvature, proper transition spirals, and a high degree of refinement in line, gage and cross level.

That these things are known to engineering and maintenance officers is demonstrated amply by the fact that they have already been put into effective use in thousands of miles of lines of the country to make modern high-speed train operation possible. In fact, it has been demonstrated conclusively that track designs, standards and methods are at hand to carry passenger and freight equipment at any speeds at which it is desired to operate it. What remains to be done is to so adjust the material and labor situations of the country that the necessary materials and manpower will be made available to put the designs, standards and methods into effect to the extent demanded by essential war-time traffic.

Fundamental to any main-line track, and especially to track carrying heavy, high-speed traffic, is a sound, well-drained roadbed. This calls for a roadbed of adequate cross section, clean, free-draining cut and side ditches, adequate bridges and culverts to carry all waterways, the elimination of water pockets through subdrainage, and adequate, clean, free-draining ballast. Equally essential to modern high-speed train operation are an adequate number of sound crossties, without which no track can be kept safe, not to mention smooth-riding, without widely disproportionate expenditures for labor for routine maintenance.

It is axiomatic even to those least familiar with track maintenance, that rail of adequate section, strength and integrity is essential to meet the needs of modern traffic. Today, thanks to the studies of the American Railway Engineering Association and the rail manufacturers, and the development of transverse fissure detector equipment, the fundamental solution of the immediate rail problem is not to be found in new designs, new techniques of manufacture, or new methods of flaw detection—all of which are open to improvements and are undergoing constant improvement. Rather, it is in the availability of adequate rail of present design and manufacture, and the more extensive use of existing flaw detection equipment as increasing traffic exacts its greater toll of rail life and increases the development and hazard of defects.

Details Must Receive Attention

As with rail, so it is with rail joints, track bolts, spring washers, tie plates and anti-creepers or other track fastenings having rail-holding properties. The immediate problem, as with rail, is not improved designs (not that improvement cannot and will not be made in the future) but rather the availability of present approved designs in sufficient quantities to insure the adequacy of the tracks to traffic demands, and the availability of adequate manpower to insure the application and maintenance of these essential track fastenings.

Where high-speed train operation or shortened over-all schedules are desired or are essential, curve reduction and the spiralling or re-spiralling of curves are essential to comfort and a sense of security, if not to actual safety of operation. Restricted speeds on curves are just as inimical to high speeds and shortened train schedules as slow orders due to work operations or to a weakened track structure. To overcome the handicap of excessive curvature, as many curve reduction projects should be undertaken in the days immediately ahead as equipment and manpower will permit, being classed with such other roadway work as embankment strengthening and cut widening, which effect substantial improvements without the use of critical materials. So important is this matter

of curve reduction that it must assume a major place in postwar railway improvements if the railways are to render the type of passenger service that will be demanded by the public.

Where dependable, high-speed passenger train schedules are to be maintained, and the same holds for dependable high-speed freight service, it is equally important that adequate protection be afforded the roadway, track and bridge structures against floods, slides, rock falls and washouts through bank strengthening, the application of riprap, stream control and embankment and slide protection devices. Even line changes must be considered where the hazard is great enough and serious interruptions to traffic are a possibility.

In addition, adequate war-time passenger service, with minimum interference to essential war-time freight service, calls for the provision or adjustment of roadside or cab signaling to meet new operating conditions; the installation of centralized traffic control and the construction, lengthening or relocation of passing sidings to increase the traffic capacity of existing lines and to permit meet and passing operations with minimum delays. It also calls for the installation of high-speed turnouts at the ends of double track and at other points of traffic diversion; the elimination of facing-point switches wherever possible; the installation of switch point locks on all high-speed switches, and especially at critical points; and, not overlooking the delays and traffic hazards of winter storms, it calls for increased attention to terminal snow fighting equipment, including various types of snow melters or switch heaters. In the light of the depleted labor market within and about most terminal areas, this latter consideration assumes large importance in the months immediately ahead, and nothing less than their unavailability should prevent heater installations of some kind at all critical points, prophecies, is some quarters, of a mild winter ahead, to the contrary.

Supplementing these essential considerations with regard to the track structure, every other part of the fixed properties having bearing upon train operation or the maintenance of motive power and rolling stock must be given consideration in the light of expedited passenger service. These additional facilities include fuel and water stations, cinder handling plants, turntables, enginehouses and car and locomotive shops, the failure or inadequacy of any of which could have as serious consequences as delays on or the inadequacy of main-line tracks.

Adequate maintenance, and some additional construction of all of these facilities, must be provided or the railways cannot long continue their remarkable performance of war-time transportation. In order that such maintenance may be possible, and that such new facilities can be built as are essential, engineering and maintenance officers are prepared to employ second-hand and substitute materials to the limit. Having done this, however, not the interest of the railways as such, but the successful conduct of the war, demands that they be allowed the necessary essential new materials to keep pace with traffic requirements.

Need Work Equipment

To the same end, in the light of the serious shortage of manpower on the railways, they should be allowed their essential requirements in work equipment and power tools for track, bridge, building and water service work. Only extensive purchases of such equipment and tools during recent years, which involved expenditures in excess of $40,000,000 from 1937 to 1942, inclusive, have enabled the railways to keep abreast of their increased maintenance work as well as they have, and only current replacements of such equipment, and such additional units as are necessary, will enable them to carry forward essential maintenance work in the days ahead.

Supplementing all of these needs of the fixed properties, engineering and maintenance officers must help themselves to the maximum extent through the salvage, reclamation and repair of materials, tools and equipment; by the closer inspection of all facilities; by planning further in advance and by the more skillful programming of work under way. To the maximum extent also, they must, of themselves, and with the co-operation of the operating department, avoid delays and interference with train operation in the conduct of their work, knowing that it would avail their respective roads nothing, and be a liability to war transportation generally, to achieve higher speeds and shorter schedules through improved facilities, only to have them offset by methods of conducting work which obstruct traffic, efficient as these methods may be in every other respect. This will call for the more extensive use of off-track equipment; the employment of more substantial falsework; the diversion of traffic over adjacent main or high-speed runaround tracks where necessary; constant contact with dispatchers; and the most careful timing of all operations.

Railway engineering and maintenance officers have demonstrated that they know all of these things—that they know what is needed and what must be done to permit constant progress in war-time passenger service. They have demonstrated also their ingenuity, loyalty and determination to see their problems through to the end—war and postwar. Railway management, with the necessary co-operation on the part of the War Production Board and those who control the manpower of the country, are ready to keep the railways abreast of needs, but there must be keen understanding and co-operation to this end, because only the necessary money, the necessary materials and the necessary manpower, combined, can do the job successfully.

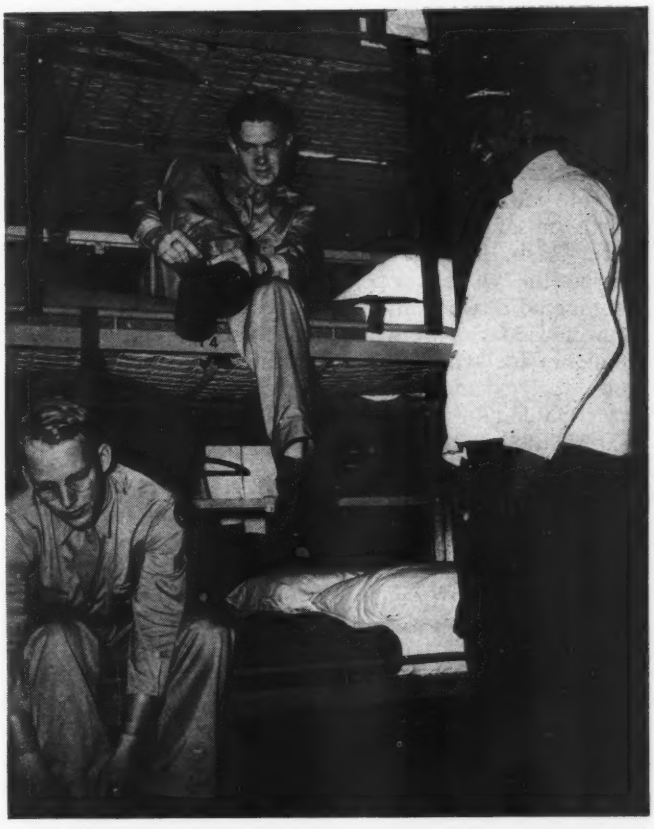
Adequate Maintenance Reserves Essential

To the extent that an unavoidable lack of materials and manpower makes it impossible to keep abreast of wear and tear, causing progressive deterioration of the fixed properties, it is imperative to the adequacy of postwar transportation, both passenger and freight—indeed to the vast readjustments in the industrial and economic life of the nation that must be made early in the postwar period—that the railways be allowed to lay aside currently, without the burden of confiscatory taxation, the necessary funds from present earnings that will enable them to overcome speedily all accumulated deterioration.

It was said recently by the president of one of the larger railways of the country that the end of the war, if long delayed, will find railway tracks in the worst condition in history. That such is a possibility is so inconsistent with the needs of the postwar period for passenger service, and with the determination of the railways that that service shall excel in speed, comfort, luxury and safety anything that they have offered in the past, that it challenges the most serious attention of every railway officer. One thing is certain, and that is that postwar passenger service cannot outstrip the track, and that with adequate track must come the reconstruction or modernization of hundreds of passenger stations and other public railway facilities if the railways are to achieve their goal of postwar preeminence as passenger carriers.

Passenger Car Designs Adapted to War and Postwar Needs

Many special-purpose cars have been built new or reconstructed for military purposes—Improved designs and new materials will feature cars of the future



Berth Arrangement in One of the Triple-Deck Troop Sleepers

WITHOUT doubt, the many great improvements in passenger car construction and appointments which were in progress before the war will be continued at an accelerated pace when peace is declared, or, in fact, just as soon as materials and manpower are again available for building this type of equipment. Any statistical forecast as to the actual number of passenger cars to be constructed in the years immediately following the war would be highly conjectural, owing to uncertainty regarding the volume of traffic which must be handled, efficiency of car use, railway earnings, etc. One thing seems assured, namely that the railways will capitalize their natural advantages of potentially fast, comfortable, convenient and safe passenger transportation in order to secure as large a share as possible of this traffic. It is obvious that the goal sought can be achieved only by the acquisition of large numbers of new modern cars to replace those which are now either obsolete or rapidly wearing out. It seems probable that for a few years, at least, the orders for new passenger-train cars will run in thousands rather than in hundreds.

As shown elsewhere in this issue, railway passenger traffic is expected to reach a grand total of about 80 billion passenger-miles in 1943, and this business, which is twice that of 1918, must be handled with a drastically reduced number of cars in service, owing to the excess of car retirements over new car installations in recent years. The figures covering number of passenger-carrying cars on line, cars retired, new cars installed and expenditures for new passenger cars tell a graphic story of railway accomplishment with limited equipment. In addition to handling the big increase in civilian passenger traffic, the railways are apparently moving this year 70 per cent more troops than in 1942 and four times as many as in 1918. It is reported that in the first 19 months of this war, 21,754,305 soldiers were handled in organized troop movements requiring 359,253 coaches and sleeping cars, additional equipment needed including 173,799 freight and baggage cars.

Troop Sleeping and Kitchen Cars

One of the most promising attempts to help in the transportation of troops by the provision of new equipment has been the authorization for building 1,200 triple-deck troop sleeping cars by the Pullman-Standard Car Manufacturing Company and 400 special kitchen cars by the American Car and Foundry Company. These cars are now under construction.

The troop sleepers, as described in a recent issue of *Railway Age,* are the first new passenger cars authorized since the beginning of the war and the first ever built exclusively for carrying troops. They are operated and maintained by the Pullman Company which supplies its regular sleeping-car service and brings new standards of comfort and efficiency to the transportation of service men.

The cars are based on A. A. R. standard box-car design, have berths for 30, high-speed trucks, complete equipment for operation in passenger trains and weigh 76,300 lb. They are not welded but consist primarily of riveted carbon-steel construction with heavily reinforced ends. The structure has been modified to accommodate the windows in the sides, and the side doors and step wells break the continuity of the bottom chord member on each car side. The end doors are similar to those on standard railway passenger cars. There are no vestibules but each car is fitted with passenger-car diaphragms and face plates. At each end is an anti-climbing arrangement which interlocks between the cars when coupled under full compression and is designed to resist a vertical load of 130,000 lb. within the yield point of its parts and attachments.

In the troop sleeper, there are three tiers of berths extending crosswise of the car with one aisle along the side instead of at the center as in usual sleeping car construction. For day use the upper berths remain stationary, and the hinged middle berth swings down to form the back for a seat converted from the lower berth. Heat-

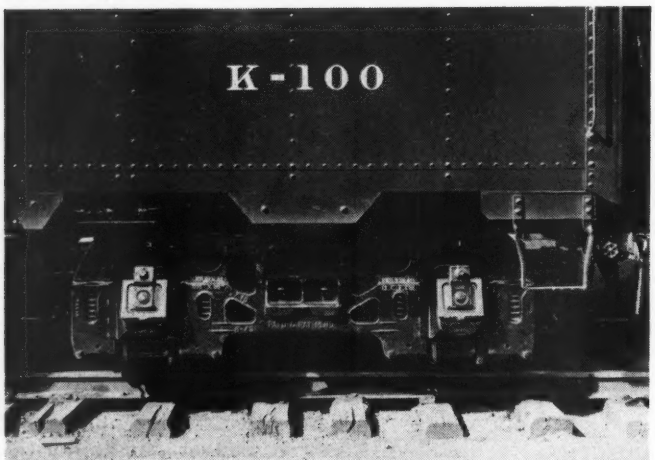
ing, lighting and toilet facilities are installed, electricity for lighting being supplied by replaceable primary-type batteries instead of axle-generator equipment and storage batteries.

The cost of building these cars is small in comparison with conventional Pullman cars. They are designed with a view to possible subsequent conversion to box or express cars for head-end service in passenger trains.

The 400 kitchen cars, also based on A. A. R. single-sheathed steel box-car design and intended for subsequent conversion into box or express cars, embody riveted construction and have a light weight of 77,500 lb. Both the side and end door openings are protected by door guards or safety bars. The windows are equipped with sliding sash, inside screens, and roller curtains which overlap the window openings. Sturdy interior equipment includes two army coal ranges with overhead canopy connected to two roof ventilators, coal box, expanded metal bin for wood, galvanized steel sink, cook's work table, shelves and drawers, refrigerator, bread locker, service table and a shower in one corner of the car.

Each kitchen car is coupled near the center of the train so that food can be dispensed from both ends to about 250 men. Each military unit using the car supplies its own cook, crew, kitchen utensils and food, the latter being served to service men who have been issued paper cups and plates.

Full-Cushion Truck Used on the Troop Sleeper and Kitchen Car



Army Gets Fleet of Hospital Cars

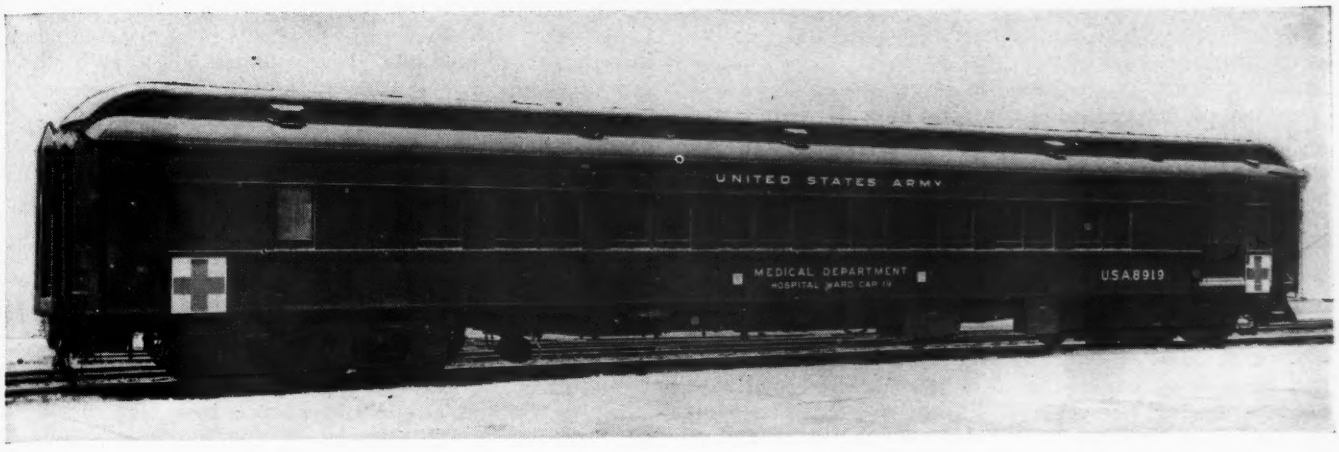
Besides the 400 kitchen cars mentioned, the American Car and Foundry Company is building at its Chicago plant 40 additional kitchen cars for use in connection with hospital ward cars now being converted largely from old railroad parlor cars at the St. Charles, Mo., plant of this company.

The army's new fleet of hospital cars, especially designed for the efficient transportation and care of wounded servicemen, includes 88 Pullman sleeping, parlor and lounge cars which, after thorough dismantling and conversion at Pullman Company shops, have been made into air-conditioned traveling hospitals, each with a capacity for about 30 patients. These cars are being operated under the direction of the medical department of the army.

Except for a few units, the new hospital cars are of two general types, 58 of them being ward cars and the others ward-table cars. The ward cars are equipped with 32 folding-type beds in two tiers. An unusual berth arrangement makes it possible for each upper and lower bed to be placed in a number of different positions. The beds may be folded against the wall for car cleaning and renovating purposes, and may also be converted into seats for the daytime use of convalescent patients. The cars are equipped with washrooms, toilets and a receiving room that has a special loading door for stretcher cases.

The ward-table cars are similar to the ward cars in design, but have 15 double-deck beds with a capacity for 30 patients and have additional equipment. The receiving rooms of these cars are equipped with operating tables, sterilizers, instrument cabinets and medical washstands. Two of the converted Pullmans are unit cars, equipped with large kitchens, personnel quarters, dispensaries, offices, and dressing rooms provided with facilities for emergency operations. Interiors of the cars are painted in light tan solid colors. Exteriors are in Pullman standard green, with a large red cross at each

Troop Kitchen Car and Inspection Party Participating in First Test Run on the C. B. & Q.



One of the Army's Fleet of Hospital Cars Converted from Older Railroad Parlor and Pullman Cars

end on either side of the car. A large red cross on the roof is visible from the sky.

Antedating the new troop-carrying equipment, and of course responsible for transporting the vast majority of military personnel moved to date, are the conventional railroad and Pullman Company cars, assigned to this service and, in many cases, especially converted and equipped for handling troops.

Older Cars Altered to Carry Troops

Early this year, for example, the Office of Defense Transportation issued a statement that nearly 800 lounge, observation, club, or parlor cars had been converted to coaches or troop sleepers. It was estimated that the conversions completed or those in progress in railroad and Pullman shops would add to the total carrying capacity about 35,000 coach seats as well as a large but indeterminate number of berth spaces.

About 1,500 surplus Pullman sleepers were converted for troop use in 1941 and, last year, 502 Pullman club, observation and parlor cars were sold to the railroads for conversion into coaches, 260 parlor cars and obsolete sleepers in addition being converted at Pullman shops into three-tier troop sleepers. The satisfactory performance of the latter cars possibly suggested the use of the new triple-deck sleepers now being constructed.

The Pennsylvania also has converted 40 box cars into troop sleepers with accommodations for 32 men in three tiers of bunks.

Express Cars Converted for Use as Diners

The inability to secure new dining-car equipment, accompanied by unprecedented demands for diner service, has forced railroads to make the most intensive use possible of this equipment and, in addition, supplement it with any cars which can be readily rebuilt from other types into diners.

The Chesapeake & Ohio, for example, has converted four standard express cars into dining cars and, to make the changeover as simple as possible, additional windows have not been included. Well-lighted and air-conditioned, the 78-ft. interiors accommodate 12 large tables and benches for seating 56 passengers who can be served breakfast in about 30 min. and luncheon or dinner in 45 min. The kitchen and pantry are nearly identical to those of a regular dining car and are equipped with the usual dining-car ranges, steam tables, refrigerators, ice cream wells, dish and plate racks and storage lockers. Twelve berths in each car are available for the crew.

An Army Hospital Car

The Denver & Rio Grande Western has converted peace-time lounge cars into trailing diners or counter cars, equipped with steam tables and two long counters with 52 stools behind the counters, backed against the windows on each side of the cars. These cars are designed for use as second diners on heavy troop trains requiring more than one diner, which, when coupled with a 48-seat diner, gives a capacity of 100 per sitting. Food is prepared in the kitchen of the diner and transferred to the steam table in the training diner, from where it is served. The car cannot be used for civilian purposes, as passengers must all be seated at the same time, but it has worked out admirably in handling the type of troop trains described, the trailing diner giving the equivalent of an added diner on each train that otherwise might not be available.

The Canadian National during the recent summer received 50 box-baggage cars from the Montreal plant of the Canadian Car and Foundry Company, Limited, these cars being equipped with end doors and plain rather than corrugated steel ends. The cars are 40 ft. 6 in. long, have a capacity of 40 tons and 3,712 cu. ft., weigh 48,200 lb. and are equipped for passenger-train service, being

used for storage mail and to carry baggage and supplies in troop trains.

It is difficult to see how the railways could possibly have met passenger traffic demands as well as indicated by the records without the use of new equipment, including coaches, placed in service in recent years. The last lot of 98 modern coaches, built for the New York Central by Pullman-Standard, A. C. F. and the Pressed Steel Car Company, for example, has done yeoman service in handling passenger traffic on this road. The same may be said for 16 coaches delivered to the same road in 1941 by the Edward G. Budd Manufacturing Company. The 20 A. C. F. high-capacity coaches which the Chesapeake & Ohio placed in operation last year have been producing passenger miles of service when most needed. The last lot of 31 new passenger cars including 25 coaches, built at the company shops of the Chicago, Milwaukee, St. Paul & Pacific, replaced older equipment in Hiawatha trains and helped meet the urgent demand for additional passenger-carrying capacity on the Milwaukee.

Similarly, sizeable orders for new passenger train cars of all types, delivered in 1941 to such roads as the Santa Fe, Atlantic Coast Line, Chicago & North Western, Missouri Pacific, Pennsylvania, Union Pacific, etc., added to the passenger car inventories on these roads at an opportune time and did much to facilitate handling peak traffic loads.

Notable Performance of Rock Island Rockets

How one fleet of modern streamline trains is contributing to the transportation of the millions of wartime travelers, military and civilian, is indicated by figures recently compiled on the six-year performance of three Rocket trains of the Chicago, Rock Island & Pacific. The Rock Island placed the first of these 15 stainless steel Diesel-powered Rockets in service between Chicago and Peoria, Ill., September 19, 1937, and upon completion of the six years service, this train had carried 1,024,043 passengers, and as a unit had been out of service only ten of 8,816 consecutive trips between the two cities, the ten "misses" being due in most cases to factors pertaining to the inauguration of the new service, track conditions, high water, etc.

This four-car Rocket negotiates the 161 miles between Chicago and Peoria four times daily at an average speed of somewhat less than a mile-a-minute, and the Diesel locomotive (No. 601) that furnishes the power has had substitute service for only 9,044 miles of the 1,400,000 miles the train has traveled in six years, or .65 per cent of the total distance.

An even more remarkable record is shown by the Rock Island Rocket operating between Kansas City, Mo., and Minneapolis, Minn., a distance of 489 miles. Since the inauguration of this service six years ago, in September, 1937, the train has made every one of its 4,386 scheduled trips, a total distance of over 2,150,000 miles, with steam protection service required on only 7,555 miles or .35 per cent of the total distance. Travel on this train has increased steadily since it went into service, rising from 117,600 passengers in 1941 to 182,400 in 1942, and indications point to record loadings of about 190,000 passengers during 1943.

The Chicago-Des Moines Rocket which provides streamliner service to the Tri-Cities and central Iowa, and connection service to points north and south, also rounded out six years of service recently, having completed a total distance of 1,565,053 miles, with substitute service required on only five of the 4,390 trips.

While modern lightweight passenger-car designs seem to be pretty well developed as regards both materials and manufacturing methods, there is no doubt that further improvements will be affected in the effort to meet keen post-war competition. New designs, even better adapted to serve the public, are definitely indicated.

Passenger Cars of the Future

For example, two new Pullman car designs are well past the experimental stage and ready for quantity production just as soon as necessary materials are available and authority can be secured to build the cars. The first of these cars, referred to as a coach-sleeper, is designed to reach into the lower-budget travel market, providing sleeping facilities at greatly reduced cost. In the daytime, the car is an attractive coach which gives a feeling of unusual roominess. Seats are all on one side of the aisle, somewhat in the continental fashion. At night the car is converted into a sleeper, with each triple tier of berths forming a section. The passenger sleeping capacity is about 40 as compared with 14 lowers and 14 uppers in conventional open-section Pullman. In some interior layouts, sections are double, each containing two triple tiers of berths. In all instances, the berths run crosswise of the car. Each section has its own lavatory facilities, with toilet and additional washrooms provided at each end of the car. The coach-sleeper is air-conditioned, and service for passengers conforms to traditional Pullman standards in all respects.

A second important development in sleeping-car design is now in service on an experimental scale and proving not only popular but potentially profitable. The car is known as the Duplex-roomette sleeper and provides private single-bed, air-conditioned rooms at a cost only slightly above that of the conventional lower berth. Each accommodation is like a traveling hotel room, with individual washing and toilet facilities, abundant roominess, and individual control of the lighting and temperature. The big bed, "made down" before the train leaves the yards, can be occupied at any time, day or night, and put into or out of use without the aid of the porter.

Trends in Car Structure and Equipment

Other new passenger car designs are contemplated. Radically new construction techniques and materials of a revolutionary character are not now in sight, although they may be just over the horizon. The war is teaching many lessons regarding what can be accomplished with new alloys of steel, lightweight alloys of aluminum and magnesium, powdered metals, etc. Railroads have accumulated considerable experience with plastics, but not enough to indicate an extensive use of these products in passenger equipment except for interior trim and wear parts not subject to great stress and shocks.

The possibilities of further improvement in weight reductions in the body structure of passenger cars of conventional size do not appear promising, although every effort should be made to reduce the weight of car details and accessories such as generators, air-conditioning equipment and seats. Passenger-car trucks are under intensive study for improvements affecting the riding qualities. It seems probable that this may effect some further reductions in weight. The future trend in design will doubtless be towards more efficient space utilization and as much standardization as is possible without retarding progress, because the amount of new passenger equipment which car builders can deliver to the railroads in a hurry after the war will be roughly in inverse proportion to the multiplicity of designs which must be supplied.

The newest large passenger terminal in the country

is badly out of date insofar as it is equipped to charge car batteries, supply standby power and maintain electrical equipment in need of repairs. This is no reflection on the design of the terminal, but is due rather to circumstances that affect all yard and terminal facilities. The unprecedented passenger traffic is in part responsible, but of greater consequence is the fact that the terminal was built before air conditioning was well established. The net result is that cars are serviced to the limit of plant capacity which can not satisfy car requirements. To a greater or less extent this is true of nearly all yards and terminals.

Air Conditioning and Lighting

Among the requirements for new passenger car air-conditioning equipment are improved control, standardization, and simplification. These objectives seem a little incompatible, but once they are given direction they will not only improve air conditioning, but will also simplify the yard and terminal problem.

The question of standardization as it applies to control, hinges around the extent to which they should be automatic. Opinion seems not to favor fully automatic control, but rather to have only very simple controls available to the trainmen and to have these controls the same in all cars.

In time the great variety of air-conditioning equipment will be reduced to relatively few types, and this should automatically effect some simplification. In the meantime it seems probable that most improvements in the near future will consist of refinements. There has been no radical change in the manner in which cars are used. The train which can be operated as a unit with head-end power supply offers intriguing possibilities, but the major demand is still for cars which can be operated independently. This suggests the Diesel-powered car which can supply its own heat and cooling, light and power. There are several such cars in service, but their extended application will require simplification and further development.

Humidity control is a desirable feature which may be developed. Its importance is mitigated, however, by the introduction of step modulation. When step modulation is used, that is when the compressor operates at varying capacity in keeping with the load instead of cycling on and off at full capacity, there are no sudden changes of humidity which make the passengers feel that they are sitting in a draft.

The question of filters is one which still disturbs many operators and maintainers, but experience indicates that this can be worked out. Various types of oil- and dry-type filters are being improved and the electrostatic filter holds promise.

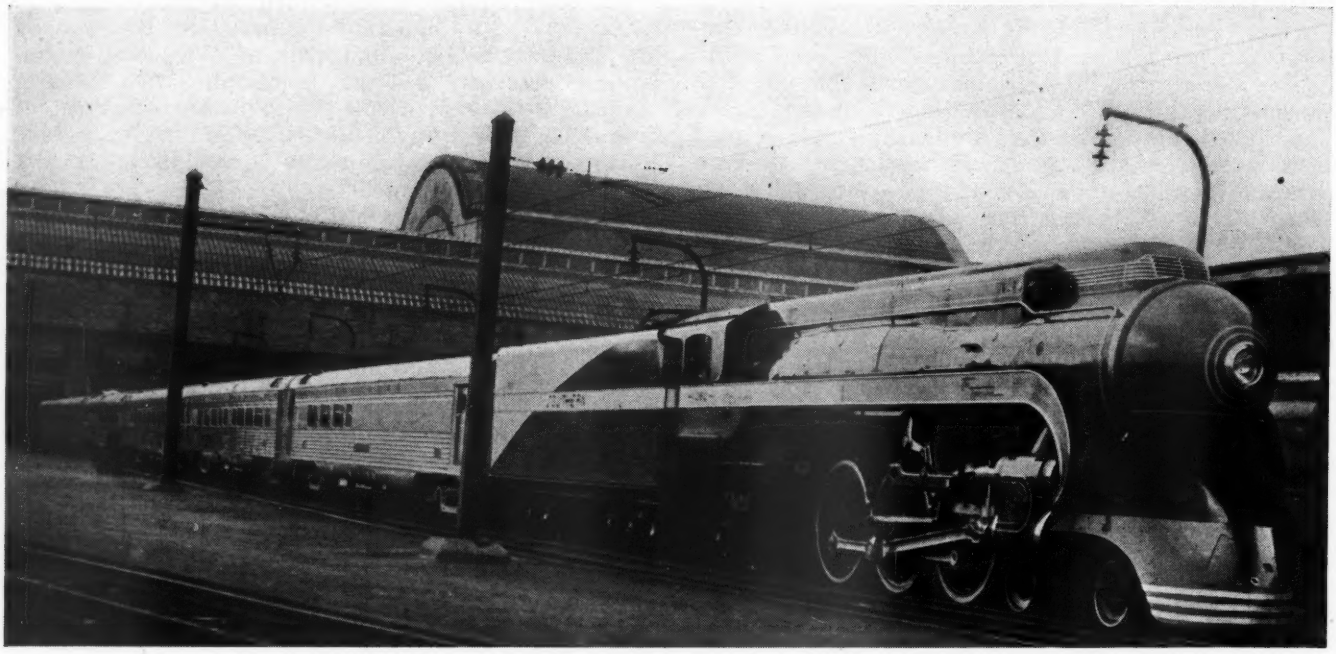
Refrigeration of foods in the dining car can now be accomplished with about one horsepower; and in view of the enormous loss of such things as ice cream and the spoilage of other perishables, it seems certain that mechanical refrigeration will replace ice and salt. The cost of salt and its damage to equipment are probably alone much greater than the cost of such refrigeration. Conceivably also, frozen food cabinets will be included in future dining cars.

Lighting systems for cars have been worked out which offer novelty, good illumination, efficiency, pleasing appearance and decoration. Which of these qualities receive greatest emphasis will depend upon what the operators consider most appealing to the traveling public. Undoubtedly much consideration will be given to low-cost transportation and to facilities which will compete effectively with buses.

The use of fluorescent lighting can be expected to increase and it is possible that cold-cathode fluorescent lighting, with its adaptability to following contours and meeting requirements of decoration will find a place in car lighting.

At least one or more railroad expects to use a 110-volt power system on new cars and should this logical procedure be followed by a number of roads it would have a profound effect on lighting, wiring, batteries, and yard terminal facilities.

Such Trains as the Rock Island "Rockets" Make a High Percentage of Their Assigned Mileage Without Relief



Motive Power—Now and Post-War

What will the passenger locomotives of the future be like?—How has a declining locomotive inventory handled a greatly increased wartime traffic?

THERE has been much speculation, mostly on the part of the traveling public and others interested in the progress of the railroads, as to the developments in motive power under present conditions of intensive use that may point to the changes that can be anticipated in passenger locomotive design for the post-war period. Before one can attempt to discuss post-war motive-power design it will almost be necessary to arrive at some sort of an assumption as to what kind of traffic the railroads may expect to have in the post-war period—a heavy volume of low-rate, popular-priced coach travel over long distances, or a partial return at least to the coach-and-Pullman traffic of somewhat less volume than the present.

It may make a lot of difference whether the passenger trains of the future will be long, full-tonnage trains or modern streamlined, light-weight equipment moving at the relatively conservative average speeds of the present or whether competition with air transport may force the design of motive power and equipment with a definite view to substantial increases in both average and maximum train speeds. There is one thing that every mechanical man knows and that is that heavy tonnages in passenger trains moving at high speed require power and until a way is found to put more horsepower into the clearance limitations imposed by the present railroad right of way there is hardly more than the solution of using more and more of the train's total length for power plant.

With permission to make the customary exception, we are going to suggest that the motive power of the next 10 years, war or post-war, will not be greatly different than that which is carrying the burden of today's history-making volume of passenger traffic.

The exception to this suggestion is the possible introduction of the geared-turbine steam locomotive and the gas-turbine locomotive, both of which are being developed at this moment and will probably be seen on the rails in this country within the next two or three years.

There is one question relating to motive power the answer to which is sought more than any other and that is, "Which is the best type of locomotive with which to haul trains—steam, electric or Diesel—and which of these will be most used in the future?" This is an intriguing question; one to which no one has yet developed an answer that all will accept. There is a deep suspicion that when experience provides the answer it can be written in but two words—"all three." There will be a definite place for all three of these types of power, each of which has demonstrated its ability so well.

Electrification for High Traffic Density

The electric locomotive used most effectively in high traffic density territory and on mountain grades, has established its place in rail transportation and, if the growth of our cities and the traffic volume over heavy grades not now electrified increases greatly there is no reason to expect that there will not be a further extension of its use. There are those who have expressed the opinion that the Diesel-electric can do all that the electric can do without the handicap of the high fixed expense of power distribution facilities in periods of low traffic volume. This is open to question and studies which

Table I—Statistics of Motive Power Assigned to Passenger Service

	Total Locos.	Serviceable	Unserviceable	Stored	Per cent active to total	Miles per active loco. per day
August, 1934	9,424	6,783	2,461	972	72.0	167.0
December, 1935	8,678	5,848	2,183	647	67.5	126.7
December, 1936	8,232	6,240	1,492	500	75.7	127.0
July, 1937	8,114	6,121	1,564	429	75.5	178.7
January, 1938	8,200	5,797	1,743	660	70.8	171.7
July, 1939	7,730	5,398	1,859	473	69.9	186.4
December, 1940	7,312	5,570	1,417	325	76.0	203.4
December, 1941	7,061	5,797	936	328	82.0	206.3
September, 1942	6,678	5,602	903	169	84.0	214.3
October, 1942	6,684	5,636	871	177	84.2	212.0
November, 1942	6,674	5,646	849	179	84.7	216.1
December, 1942	6,758	5,949	665	144	87.2	226.0
January, 1943	6,765	5,807	794	164	85.9	214.6
February, 1943	6,718	5,750	796	172	85.5	218.0
March, 1943	6,717	5,779	798	140	86.0	220.7
April, 1943	6,705	5,764	802	139	86.1	218.6
May, 1943	6,723	5,781	794	148	86.1	213.2
June, 1943	6,687	5,702	839	146	85.3	219.5
July, 1943	6,717	5,763	811	143	85.9	223.9
August, 1943	6,738	5,770	842	126	85.5	226.2

Note: The above taken from I. C. C. Passenger Train Performance Statistics, Statements No. M-210 and M-240.

are being made at this time will no doubt provide the means of eventually finding an answer. In any event, the electric locomotive is a highly refined machine and no radical changes in its general design, other than that of appearance, seem probable in immediate future.

Steam Has Met the Challenge

Until the early years of this century the steam locomotive stood unchallenged and it took the development of electric traction to wake up the designers of steam power. During the era of expansion in electrification most people in the railroad industry did not realize the extent to which the steam locomotive had been improved. These improvements, hinging mainly on increased boiler capacity, led to great increases in tractive force and hauling capacity and put the steam locomotive in a dominant position where it remained, again practically unchallenged, until the advent of the Diesel-electric.

Now, again, history repeats itself for during the past 10 years, when the spectacular performances of Diesels have taken the front of the stage, many major improvements have been made in steam power which place it in a position better to compete with its new adversary. These improvements have previously been discussed at length but it is worth while to point out here again that alloy steels, roller bearings, welded parts, light alloy reciprocating parts, better balancing, poppet valves, lateral motion control, cast beds and mechanical lubrication have all helped to build a motive power machine that is far better than many of us realize.

There are not many long passenger runs where high mileages can be built up so that on most roads a monthly average of from 7,500 to 12,000 miles is good performance, but the important point in this case is that these mileages, made with less-than-10-year-old power, are about twice as much as can be made with 20-year-old steam power and these new locomotives can operate from 25 to 50 per cent more miles between shoppings for general repairs.

Given the runs of sufficient length new steam power can turn in over 24,000 miles a month and that means an availability percentage far higher than anyone believed possible only a few years back.

The steam locomotive operates under certain handicaps. The time required for inspection, servicing and fire cleaning place a definite limit on minimum terminal turning time but many marked improvements have been made within the past five years that have reduced terminal time to unbelievably short periods. A recent 30-day check on a group of 50 modern 4-8-4 locomotives showed an average turning time of 3 hr. 18 min.

Probably the most serious handicap under which the steam locomotive labors is that of high boiler maintenance expense. On some roads this amounts to more than 50 per cent of the cost of a Class 3 repair. There is every reason to expect that some of the major improvements of the immediate future will be in boiler design, materials and construction and that an improvement of this condition will be found.

The future of the Diesel-electric seems safely assured. Its inherent characteristics of high-speed, high starting capacity, high availability, long runs without service stops and low operating cost make it the answer to an operating man's prayer, and it is here to stay, particularly on assignments where high mileages are possible. What of post-war changes in design? Again we venture the suggestion that the Diesel-electric of today has demonstrated that it is good enough to remain for some years, in general design and principle, much as it is today with the major improvements leaning heavily toward refinements that will reduce the cost of maintenance and increase engine horsepower substantially above those now prevalent within present space limitations. Increases in the cost of fuel will probably be offset by improved fuel efficiency.

How Has the Traffic Been Handled?

One of the most important questions with which we are concerned in the matter of passenger motive power is, "Why has the supply of passenger locomotives, apparently inadequate a year ago, continued to meet the increasing volume of 1943 traffic?"

The statistics of passenger operation show, in a broad way, how motive power has been able to handle the job

Table II—Distribution of Passenger Locomotive Mileage —1936-1943

	Passenger locomotive-miles (thousands)			
	Total	Steam	Electric	Diesel
1936	371,858	355,375	15,213	1,269
Per cent of Total	.....	95.5	4.1	0.4
1937	384,971	364,814	16,106	4,051
Per cent of total	.....	95.0	4.2	1.03
1938	357,120	332,883	16,722	7,615
Per cent of total	.....	93.2	4.7	2.1
1939	357,339	329,308	17,556	10,476
Per cent of total	.....	92.2	4.9	2.9
1940	362,312	324,075	18,456	19,781
Per cent of total	.....	89.5	5.1	5.4
1941	380,269	329,411	20,053	30,805
Per cent of total	.....	86.6	5.3	8.1
1942	421,203	358,798	22,823	39,581
Per cent of total	.....	85.2	5.4	9.4
1942*	271,213	230,507	14,926	25,881
Per cent of total	.....	85.8	5.5	9.5
1943*	307,164	263,568	16,128	27,468
Per cent of total	.....	85.84	5.24	8.92

* Eight months.

Note: The above data taken from I. C. C. Statement No. M-213.

over a period of years by constantly utilizing a greater percentage of the total locomotive inventory and increasing the number of miles per day, but the extent to which this same job has intensified in the last 12 months is best shown by a comparison of the statistics of the first eight months of 1942 and 1943. In this eight-month period of 1943, as compared with 1942, passenger train-miles increased 10.8 per cent while passenger train car-miles increased 18.1 per cent and the number of cars per train increased 10.6 per cent. The average locomotive-miles per day increased 19.5 per cent.

Table II shows the increasing proportion of the passenger traffic burden that is being carried by the Diesel-electric road locomotive for there is a reduction of from 355 million to 230 million steam passenger-locomotive miles, resulting in a reduction of the percentage of steam mileage to the total from 95.5 to 85.8. An analysis of the figures for the first eight months of 1943 and 1942 will show that the relation of passenger locomotive-miles to total by types of power has stabilized with the figures shown on the last two lines of Table II. The chances are they will remain approximately at those proportions until such time as additions are made to the locomotive inventory.

Table I shows better than words what present motive power policies may lead to. There has been a reduction as compared with December, 1940, of approximately 600 locomotives available for passenger service, while at the same time there was an increase of 200 serviceable locomotives; a decrease of almost 600 unserviceable locomotives and a decrease in stored power to the all-time low of 126. This situation means that whereas in December, 1940, 76.0 per cent of the total locomotives were used to handle the traffic of that month, 85.5 per cent had to be used in August, 1943, and the miles made by each active locomotive per day increased from 203.4 to 226.2 in August of this year.

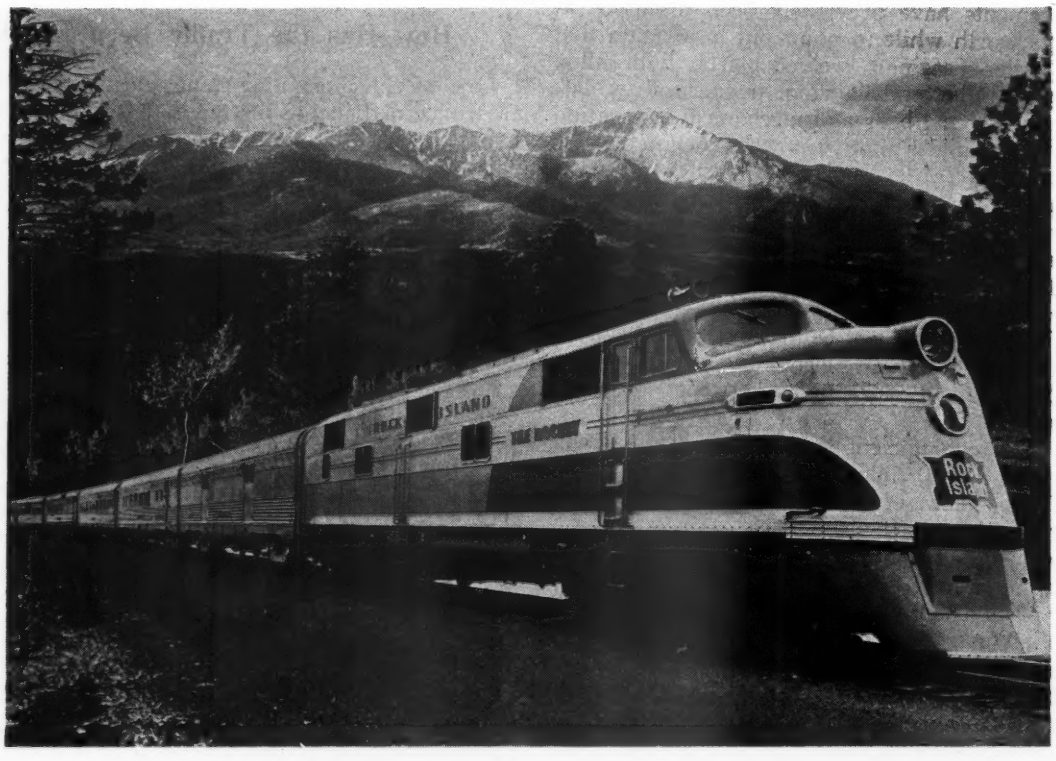
An analysis of the passenger locomotive mileage shows an increase this year over last year of 13.2 per cent in total passenger locomotive-miles; an increase of 14.4 per cent in steam passenger locomotive-miles; an increase of 8.1 per cent in electric passenger locomotive-miles, and an increase of 6.2 in Diesel-electric passenger locomotive-miles.

In spite of the increase in passenger train-mileage handled by Diesel-electric locomotives there, naturally, could be no great increase in the percentage of Diesel-electric locomotive mileage to total locomotive mileage without a substantial increase in the inventory of Diesel-electric locomotives—and it is similarly true of electric locomotives—for these now in existence are making just about all the mileage per day or per month that it is humanly possible to get out of them. This is demonstrated by the fact that modern steam locomotives on some roads will not average more than 7,500 to 12,000 miles per month, whereas the highest monthly mileage on record for steam passenger power is 24,181.

The modern steam locomotives on roads of the low average monthly mileages are as low as they are because of the limits of relatively short runs, whereas given runs long enough, the steam locomotive has demonstrated its ability to make the high mileage mentioned. Records of electric locomotive mileage indicate averages in the neighborhood of 17,000 miles a month.

The statistics of several individual roads operating large numbers of Diesel-electric locomotives in road service show maximum monthly mileages of from 21,612 to 32,087, with minimum monthly mileages varying from 9,756 to 16,670. The availability figure on these same roads varies from a minimum of 92.8 to a maximum of 98.4.

An interesting sidelight on Diesel-electric locomotive mileage by comparison with the percentages shown on Table II is that of one road which in 1942 operated 16,511,000 passenger locomotive-miles, 12½ per cent of which was Diesel-electric and the remainder steam. The same road operated 137,836,000 passenger car-miles, 14½ per cent of which was Diesel-electric and the remainder steam. The higher percentage of car-miles to locomotive-miles may be some indication of the hauling capacity at high speed of Diesel-electric equipment in passenger service.



In C.T.C. Territory the Train Movements Are Authorized by the Indications at Controlled Signals

Modern systems reduce train delays, thereby increasing the overall average speeds and adding to track capacity

SIGNALING

keeps passenger trains moving in war-time

ANALYSIS of train operation on lines which are handling heavy war-time traffic develops certain conclusions concerning the benefits of modern signaling systems in the operation of passenger trains in war that will apply also in the post-war period. A primary objective from the passengers' point of view is to provide safety of travel and on-time arrival at destination; he also desires to avoid unnecessary train stops and starts. Modern signaling is an important aid in providing acceptable passenger service on multiple-track lines, but in this war it has been applied most extensively and has been of greatest benefit on single-track lines.

As Applied on Single-Track

Soon after the United States entered this war, unusually large volumes of passenger as well as freight traffic were thrown on many railroad lines. Serious delays were most acute on certain lines through the south and southwest which include extended sections of single-track on important through routes. Trains loaded with munitions and troops were given preference. As a result, scheduled passenger trains were held on sidings to such an extent that they arrived at their terminals hours late.

Study showed that the railroads faced the necessity of handling an ever-increasing volume of passenger business, and at the same time of keeping those passenger trains from interfering with the operation of trains handling munitions and other war materials, as well as important civilian foodstuffs.

Even if rails, ties and other materials had been available, second track could not have been planned and constructed in time to be of much benefit in winning this war. Furthermore, such additional track facilities might easily prove to be unnecessary after the war closes. The problem, therefore, was to devise some means to move more trains faster over the existing single-tracks.

On many divisions, the operating departments did the best they could with the established timetable and train-order method of authorizing train movements, but with scheduled trains running late, and with numerous extra trains to handle, interference increased in proportion to the square of the increase in the number of trains. In some instances, as many as 60 trains were dispatched from terminals in a 24-hour period, but these trains spent so much time on sidings that an increasing number failed to keep within the 16-hour limit.

On numerous occasions dispatchers were so busy keeping trains moving out on the line that they could not get around to issue the necessary orders to trains that were ready to leave yards, even when track was available for them to depart.

Centralized Traffic Control

All these war-time troubles and train delays with timetable and train-order operation stood out in marked contrast with the results that were being obtained on territories which were equipped with centralized traffic control before the war, or on those sections which have been provided with such facilities since December 7, 1941.

Centralized traffic control is a system for authorizing train movements by the indications of signals at the

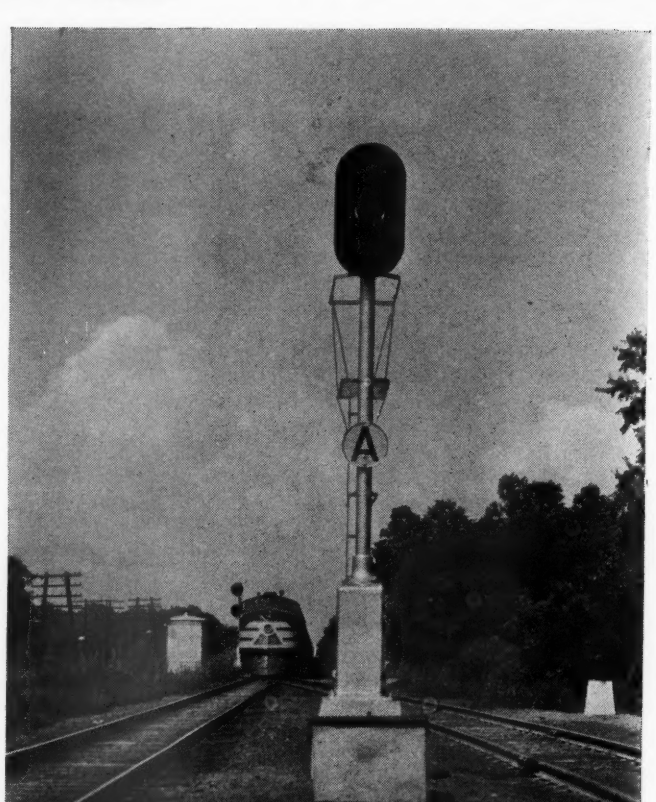
locations where action is to be taken, rather than by the use of timetables and train-orders. These signals, as well as the power switch machines at crossovers, junctions and passing tracks, are controlled from a central point. Starting in 1927, the railroads have installed centralized traffic control on 3,592 miles of tracks up to January 1, 1943.

The train time saved by centralized traffic control, falls into two categories. Power-operated switches, as compared with hand-thrown stands, permit the average freight train to save from 5 to 6 minutes when entering a passing track, and from 8 to 10 minutes or more when departing. Based on actual field tests, as well as statements of dispatchers, the use of power switches permits a train on a siding to pull out, proceed to another siding and enter it in approximately 15 minutes less time than was possible with hand-thrown switch stands. This fact, in numerous instances, makes it possible to advance a train one or more stations beyond that at which it would otherwise have been held for a delay.

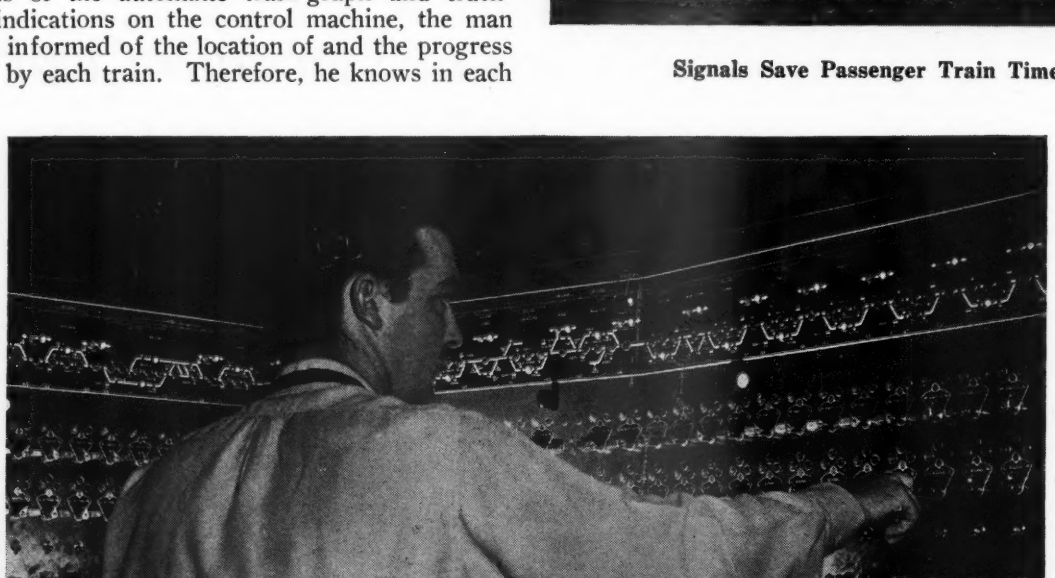
The second saving in time by C. T. C. is accomplished by the semi-automatic signals, the indications of which authorize trains to (1) proceed to the next station, (2) enter the siding or (3) depart from the siding and proceed to the next station. These signals, which are controlled by the man in charge of the C. T. C. machine, are, in each instance, located at the points where the enginemen are to take action. Therefore, the enginemen operate in accordance with aspects displayed by the signals, with no need for checking timetables and train orders.

By means of the automatic train-graph and track-occupancy indications on the control machine, the man in charge is informed of the location of and the progress being made by each train. Therefore, he knows in each instance whether time is available to advance a train past one siding to another siding to meet another train, rather than hold it at the first siding. Thus with C. T. C., meeting points need not be established until the circumstances contributing to the most efficient operation are known, whereas with other means of operation, the meeting points must be established by train orders, which must be issued considerably in advance of the time when they are to be acted on, frequently without a means for changing the orders fast enough to take advantage of changing conditions. On some of the more extensive C. T. C. projects where the passing tracks are one and one-half to two times the length of a train, approximately 90 per cent of the meets are timed so closely that neither train is required to stop.

A further important factor in improving operation



Signals Save Passenger Train Time



This C. T. C. Machine Controls the Power Switches and Signals on 171 Miles of Road

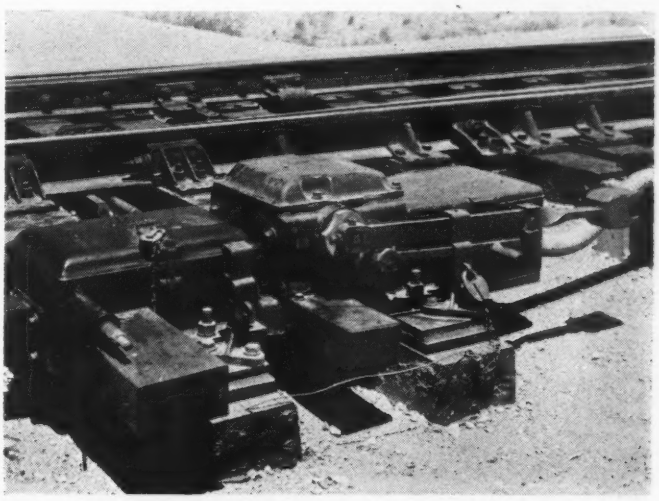
is that with C. T. C., trains can be accepted promptly when they are ready to go, and their movements need not be planned so far in advance, whereas when movements are authorized by train orders and restricted by timetable, the orders must be established so far in advance of their actual planned departure that close dispatching is impossible. Extensive delays are then incurred by the issuance of new orders.

Looking to post-war operation, centralized traffic control should also be considered from the standpoint of the increase in track capacity accomplished. In many instances the need for increased track capacity is measured not by the total number of trains handled in a 24-hour period, but rather by the number of trains which should be kept moving during certain hours of peak traffic. The operation of every train, both passenger and freight, over a division in minimum overall time during peak hours, as well as during slack periods, is the objective obtainable by C. T. C., but impossible with the train-order system because of physical limitations of the train dispatching system.

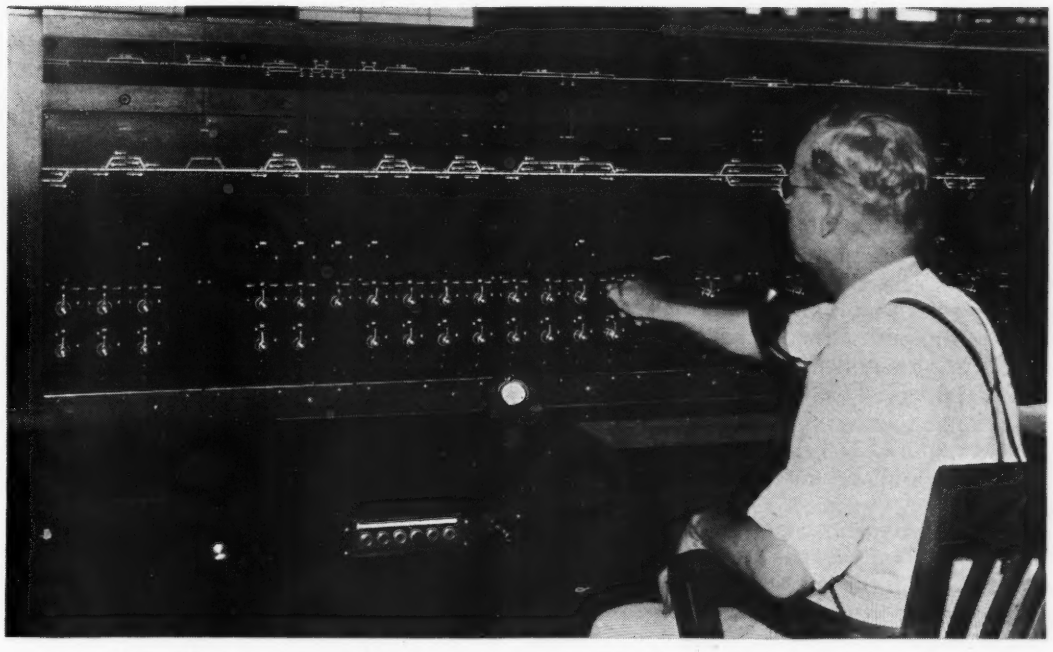
C. T. C. Steps Up Single-Track Capacity

In brief, results of studies made on existing projects prove that the installation of C. T. C. on a busy single-track line will increase the track capacity 50 per cent during peak hours; or in other words, 50 per cent more trains can be kept moving. Thus the centralized traffic control now in service on many single-track lines has been the means whereby unprecedented numbers of trains, occasioned by war traffic, are being handled without delays. Some of these installations are in service on the Union Pacific; the Atchison, Topeka & Santa Fe; the Southern Pacific; the Western Pacific; the Missouri Pacific; the Louisville & Nashville; the Norfolk & Western; the Denver & Rio Grande Western; the Seaboard Air Line and other roads. On several of the roads mentioned above, further centralized traffic control projects have been authorized and are now under construction. The primary objective of pushing all these projects to early completion is to afford further aid to war-time transportation. After the war, when the volume of traffic is more nearly normal, these C. T. C. installations will continue to save train time, and the savings in operating expenses effected will more than carry the investment cost of these projects.

The war period is, therefore, affording an abundance of information concerning the benefits of abandoning the timetable-and-train-order system of train movement in favor of centralized traffic control. The post-war problem will be so to plan centralized traffic control that it will be adaptable to the traffic requirements on many of the single-track lines that are not now so equipped. The objective of these signaling projects, so far as passenger service is concerned, is two-fold: to reduce the overall time of through passenger trains between widely separated termini, and to facilitate the operation of local trains in co-ordination with the through service.

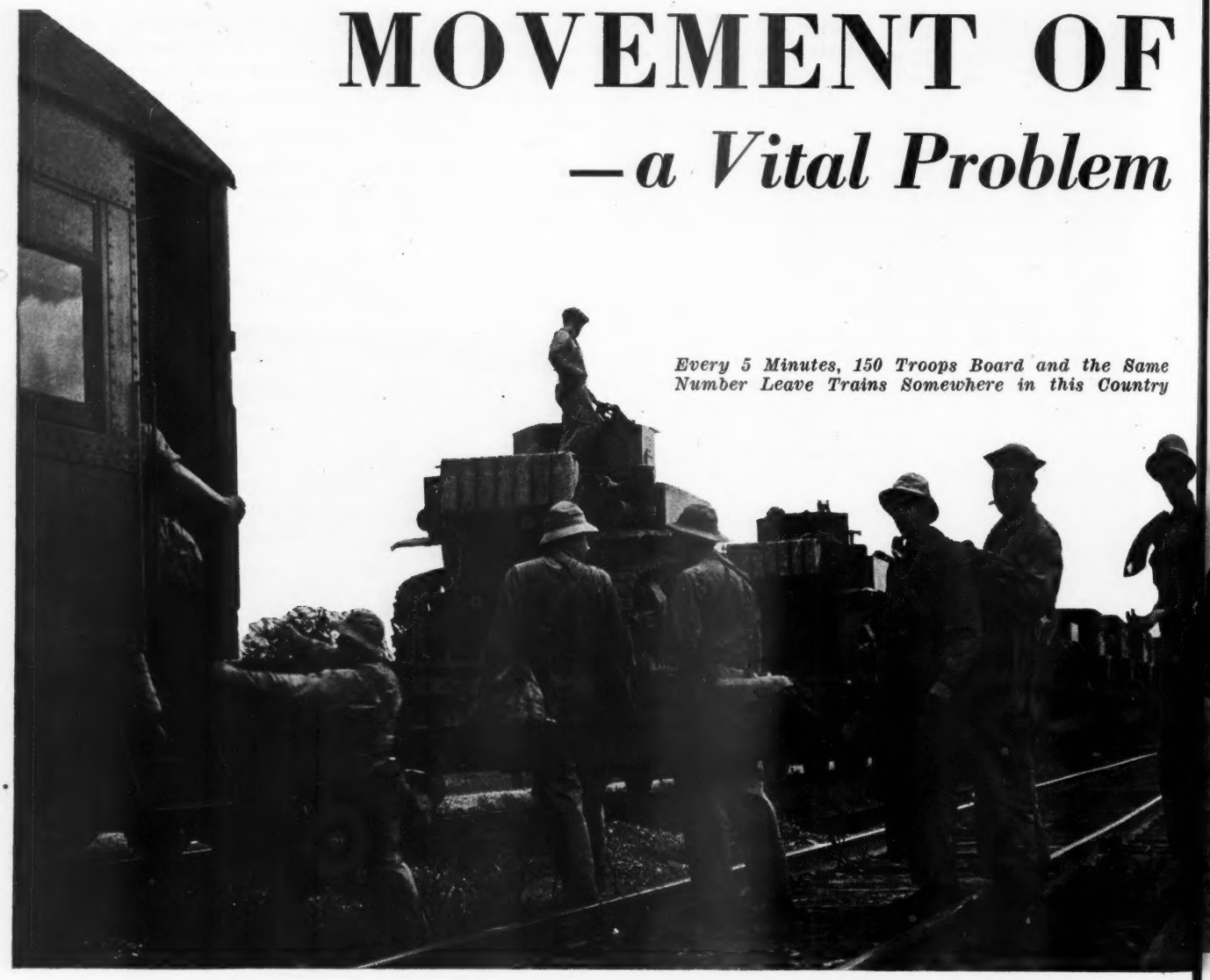


Switch Machines Save Train Stops



The Illuminated Track Diagram on a C. T. C. Machine Indicates the Progress of All the Trains on the Line

MOVEMENT OF —*a Vital Problem*



Every 5 Minutes, 150 Troops Board and the Same Number Leave Trains Somewhere in this Country

The volume of this traffic has grown to tremendous proportions with no let-up in sight

DURING the first 19 months of the present war, the railways transported 21,754,305 soldiers in organized movements. This compares with the 19-month period which comprised the entire duration of the last war, during which 8,874,708 soldiers were moved by rail. Between December, 1941, and July, 1943, an average of 100,000 soldiers per day have been handled by the American railways, in organized movements, in small groups or on furlough. The equipment requirements for the first 19 months of this war amounted to 359,253 coaches and sleepers, as compared with 136,367 coaches and sleepers used during the 19 months of the last war. Troop trains in this period also required 173,799 freight and baggage cars, as compared with 34,784 freight and baggage cars required in the last war.

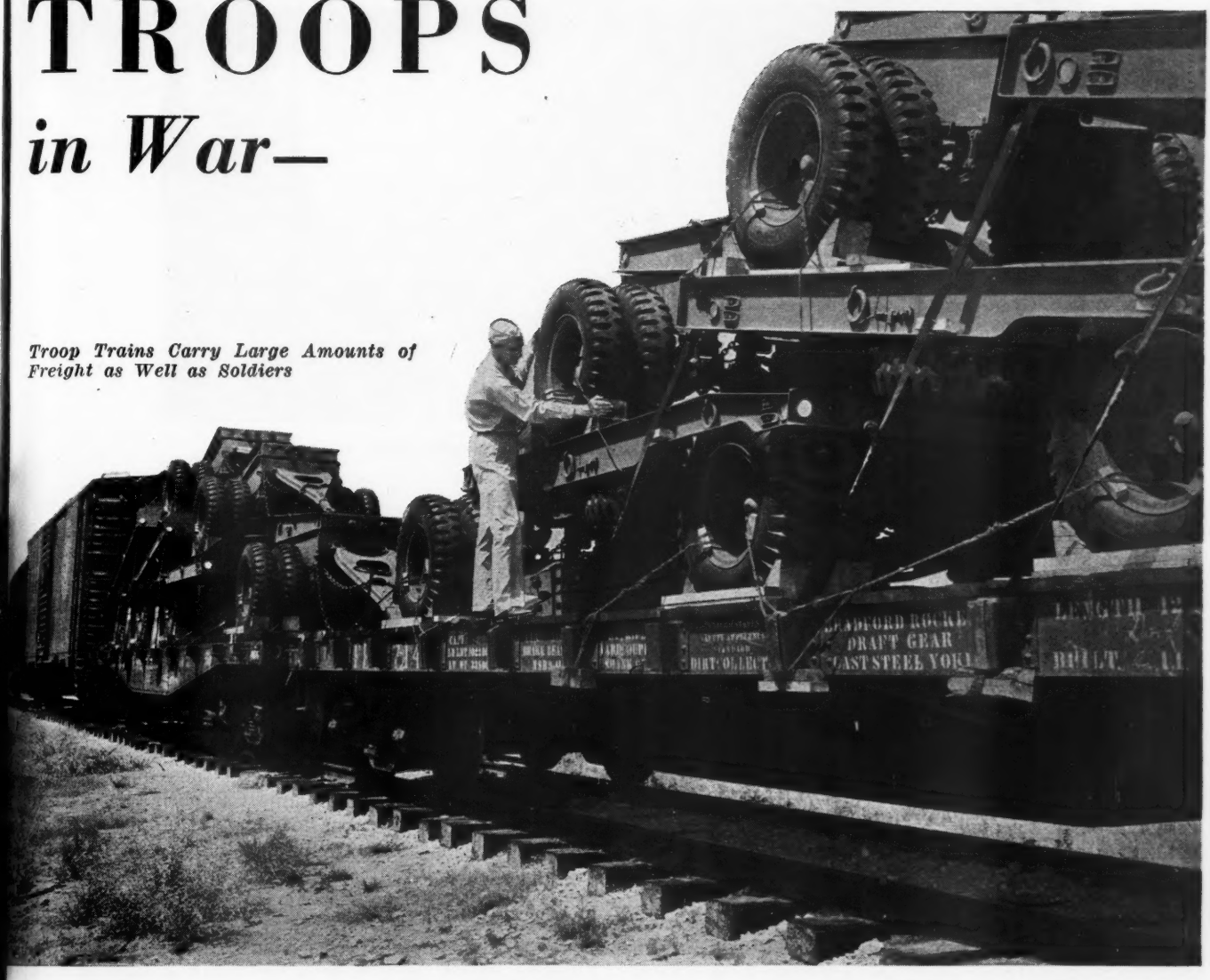
In this war, troop movements constitute approximately 19.1 per cent of the total railway passenger-miles, as compared with 8.6 per cent in the last war. On the average, an organized troop movement originates somewhere in this country every five minutes, day and night, and every five minutes 150 troops entrain and 150 troops detrain on American railways.

The fact that this gigantic task has been accomplished and continues to be accomplished with far fewer available passenger-carrying cars than in 1917-18 is a tribute to the railways and to the Transportation Corps of the Army Service Forces and particularly to the thorough-going and effective co-operation that exists between them. In any task of such unprecedented proportions, there is bound to be a certain amount of waste motion, but this has been progressively eliminated.

How It Is Being Done

The War Department has maintained stringent control over its overall handling of the movement of its troops and impedimenta. The exigencies of modern war have required a much larger army than was employed in World War I. Current training programs have necessitated a much greater flow of troop movements within the continental limits of the United States. To meet this task, the rail carriers have had available less passenger and freight equipment than was available in the last war. The War Department, through the Office of the Chief of Transpor-

TROOPS *in War—*



Troop Trains Carry Large Amounts of Freight as Well as Soldiers

tation and its Traffic Control Division, has been the guiding hand in facilitating this performance by the railroads.

Prior to the outset of hostilities, machinery was in operation whereby centralization of control of bulk movements of troops and impedimenta in parties of 49 or more was invested in the Traffic Control division. This centralized control was handled strictly and exercised rigidly to prevent the waste of equipment and power. A few months ago this control was tightened even more to the extent that its jurisdiction was extended to the movement of groups of 39 or more.

Constant liaison has been maintained with all War Department services for the purpose of co-ordinating the movement of troops, as far as military necessity would permit, in order to assure maximum utilization of railway equipment.

Traffic Control established its own car service section to provide a fuller utilization of sleeping car equipment. Through its operation and direct liaison with the Pullman Company, this car service section effected a saving of 13,046 sleeping cars in the 11 months since November 15, 1942. That means that over 450,000 soldiers were able to get a good night's rest in bed whereas they would otherwise have had to sit up all night in coaches if this section had not been in operation.

In order to facilitate the solution of operating problems confronting the carriers and to give them time in which to prepare for troop movements, Traffic Control was given, with certain exceptions, authority to fix dates of movement of troop traffic. This responsibility has been exercised to the extent that during the month of September, 1943, only 1.5 per cent of all troop movements channelled through Traffic Control were given to the carriers for movement with less than 72 hours' notice. All division movements are scheduled, routed and planned at conference tables, under the direction of Traffic Control division, wherein carrier representatives are given a voice in the planning of these large movements. Other periodic conferences are in the field by this office with local transportation officers, in which representatives of the carriers are in attendance, for the purpose of reviewing in open discussion policies and problems relating to the troop movement situation.

All possible authority has been delegated to the carriers to consolidate small movements in order to effect savings in power and equipment. Steps were taken many months ago to reduce cross-hauling to a minimum and to co-ordinate the flow of troop movements to the maximum, consistent with military necessity.

Adding to Car Supply

The number of cars available for troop movements has been augmented during the year by the building of 1,200 special troop sleeping cars by the Pullman-Standard Car

Troop Trains Have Supplanted Vacation Travel in the Scenic Spots of the West

and Manufacturing Company and 400 troop kitchen cars by the American Car and Foundry Company. The kitchen cars will relieve the shortage of dining cars to some extent, although they are largely intended to supplant the somewhat makeshift kitchen arrangements that have heretofore been installed in baggage cars and used to feed troops at their seats. The 1,500 Pullman sleepers that were reconditioned in 1941 for troop use have also been of the utmost value. Pullman further augmented the supply in 1942 by the conversion of 107 parlor cars and 153 obsolete sleeping cars into three-tier sleeping cars for troop movement.

In the first World War, only 25 per cent of the troops were moved in sleeping cars, whereas now Pullman is handling nearly 66 per cent of the troop traffic.

Outstanding Records

Within three weeks after the attack on Pearl Harbor, more than 600,000 troops had been gathered from all sections of the country and sent to the Pacific Coast on troop trains. This was one of the greatest emergency mass movements of troops in history. It demonstrated that the American railways are and will continue to be the most important and essential transportation agency in the country.

From this tremendous beginning, troop movements on the railways have continued to set up records. This was, of course, an emergency movement of extreme urgency, and there were many others to follow. However, the Transportation Corps realized very early that, as the Army expanded, permanent training camps became established, and routine movements in connection with training were undertaken, there would be an increasing opportunity for more intensive use of the equipment available for military uses.

Economizing Cars in Troop Handling

One of the first of these co-ordinated movements on a large scale occurred early in 1942. In reviewing the troop movement plans of the Ground Forces, transportation officers observed that, within a short space of time, there would be movements of entire divisions out of Fort Knox, Ky., Fort Devens, Mass., and Camp Barkley, Texas. Instead of handling each as a separate move, the necessary equipment was assembled at Fort Knox and the division was moved to Fort Dix, N. J. From there the equipment was deadheaded to Fort Devens, from which point it moved a division to Fort Mason, Calif. The equipment was then deadheaded back to Camp Barkley, Texas, and was loaded there with a division for Fort Devens. When the equipment arrived at Fort Devens, 95 per cent of the freight cars were of Eastern ownership.

This was the first of many such co-ordinated movements, the most extensive of which involved the movement of seven divisions and one cadre with one set of railway equipment. This particular movement started at Blanding, Fla., from which point troops were moved to Camp Forrest, Tenn. From there, the empty equipment was deadheaded to Camp Campbell, Ky., from which point a division was loaded for Camp Polk, La. Another division was moved from this point to Desert Training Center, Calif.; still another division was moved from this center to Camp Cooke, Calif.; and another division was moved from Camp Cooke back to Camp Forrest, Tenn. The equipment was then deadheaded to Fort Leonard Wood, Mo., from which point a division was moved to Desert Training Center. Still another division went from there to San Luis Obispo, Calif.; from that point a division was moved to Camp Rucker, Ala., and, after 30 days, the equipment was back in the territory from which it had started, after having moved thousands of troops many thousands of miles, with little empty mileage.

Saving Cars in Moving Trainees

While this sort of co-ordination of many trains for the movement of divisions is spectacular, the routine work done by the Car Service section of the Passenger branch of the Traffic Control division, accomplishes as much or more in savings in equipment. For example, a rearrangement of plans at the Air Corps progressive schools has saved much equipment.

Under this plan, the incoming students are brought in, and the graduating class moves out in the same equipment the next day.

There is nothing so vital in American passenger transportation today as the movement of troops. If necessary, of course, all else would have to be subordinated to this movement, but the splendid performance of the railways has made this a highly unlikely contingency. In accomplishing this, the railways have been aided greatly by the Transportation Corps, commanded by Major General Charles P. Gross, and the operating methods now used are approaching a very high record of efficiency.

Communications and Books . . .

Wise Personnel Practices Would Aid RRs Competitively

MT. VERNON, N. Y.

TO THE EDITOR:

Mr. Horning is to be highly commended for crystallizing the problems of one of the newest and most difficult phases of railroading into his lucid article entitled "Personnel Practices." (*Railway Age,* November 6)

As a student of personnel administration, Mr. Horning appears to have grasped the fundamentals of the subject in general and successfully adapted them to the specific field of railroading. As he points out, however, the many years of railroad "trial and error" methods have had their definite adverse effects upon the modern personnel policies of today. It is a fact that the majority of railroads today still seem to be totally oblivious to the tremendous role personnel administration can play in winning post-war traffic for their industry. Through its morale-building influences—as a result of good working conditions, opportunities for promotion, extra-curricular activities and the like, and through efficiency which results from "finding round pegs for round holes," modern office and operating procedure and the use of planning, personnel administration will directly affect management's relationship with the railroad employee and the latter's relation with the public.

Despite the individuality of the personnel situation of a railroad, I firmly believe it would be good policy to adopt some basic fundamentals used generally throughout all business and apply them to our particular set-up.

First, the advantages of a centralized personnel office are manifold. Upon this premise lie all good personnel practices. Undoubtedly the difficulty in attaining this objective has led to the apathy so common in the railroad industry. Probably one of the most direct beneficial results would be the better contact the far-flung organization would have with the public in general and interested applicants in particular. It is not uncommon to find people who just don't know whom to see for a job on a railroad. As the situation now exists, individual supervisors, chief and assistant chief clerks—and persons in comparable positions of a supervisory nature who are generally charged with specific duties—are also burdened with the necessary evil of hiring and firing. Generally untrained for this specialized work, it is natural that numerous mistakes and actual abuses result. Certain values of education, character and training are overlooked and the effect of racial, religious or personal prejudices may be felt.

As applied to a vast railway system, the concept of a strictly centralized personnel office would naturally have to be modified, but the principles and functions should remain. The office would necessarily have branches along the lines and in the various territories tapped by the system. A line organization should be maintained, however, with the central office, located together with the general offices of the railroad, directing the branches in practically all details. All changes of position, whether transfer or promotion, and all placement and discharging should be accomplished through this office. In many cases the initial impetus should come from the office itself, but in all instances all the relevant factors should be considered even when recommendations are made to it.

Second, the personnel office should be directed by a competent, sincere and absolutely courageous man. His rank should be that of vice-president; at least he should hold a position comparable to any other officer in the company other than that of the president. Such organization is necessary so that the office can expect and in cases demand the respect and co-operation it needs to function efficiently and carry out the policies which it has formulated. It is unfortunately true that, despite the noble efforts made to follow this plan, many an "old time" railroader will ridicule and discourage the efforts put forth by the personnel office. It appears that the only way to combat this attitude is for the office to prove its worth by its accomplishments and by publicizing itself and its purposes to the personnel itself.

Third, personnel records should be kept by the personnel office alone, rather than in the individual archives of numerous operating departments and offices. All too often the faults of record-keeping as it now exists are evidenced by lost, ill-kept and generally confused files. In these days of numerous deductions for pensions, bonds and insurance, the need for central filing of personnel records is imperative.

In addition to the many advantages attained by such central records, that of "upgrading" and classification is probably the most important. The use of such a plan is well illustrated by the U. S. Army's qualification card which has on it listed all the pertinent information concerning a soldier from the moment of his induction to the time of his discharge. Thus does the Army successfully "upgrade" and seek to advance its men on the basis of catalogued information. Such a plan may well be adopted by a railway system which employs so many men not under direct supervision, but nevertheless periodically reporting to supervisors, as well as those who work in immediate contact with their department heads.

Fourth, the wide-awake personnel office seeks qualified personnel. Realizing that education plays a large part in the development of intelligence, ambition and foresight, colleges, institutes and professional schools are canvassed thoroughly and often in an effort to secure the services of graduates and direct their interests to particular fields of endeavor. Thus does every personnel director realize that he is in competition with, not only industries in his own field, but all types of enterprises. It is a regrettable fact that the railroads have been negligent in this endeavor. It is only recently that your magazine included a series of articles to prove the seriousness and dire consequences which have resulted from such negligence. The railroads, in general, have been content to accept the remains after the cream of employables has been taken by enterprising and alert, progressive manufacturing concerns. Railroad curricula in colleges have been on a steady decline for the past two decades and general enthusiasm and interest by modern youth in the railroad industry as a whole is sadly lacking. In all this, poor, misguided or the entire lack of adequate personnel policies are responsible.

Lastly, training programs should be established within the railroad industry so that the people hired through the procedure outlined above can be guaranteed an opportunity, at least, to make good. Programs for accountants, rate clerks, various types of agents, engineers, maintenance men, and in personnel administration, advertising, management and engineering research, statistics, law, land and tax and, in fact, for all occupations demanding higher learning or extensive knowledge should be provided. Thus could the railroad save the time and expense involved in taking a perfectly new and inexperienced applicant who is ignorant of special knowledge and allowing him to go through years of monotonous and boresome routine, only to attain a responsible station when he is past the youth which holds vision, courage, ideas and imagination.

Today we know that a youthful, ambitious, imaginative fellow with a good formal education is an asset to any business. If such an individual is placed in an efficient training program and feels that it is well supervised by those in a progressive concern who firmly believe in upgrading, and when he gains the experience necessary to mature him in his work, then the results are mutually the most beneficial to the employee, the company and society as a whole.

KEITH M. LANGE.

Prefers Steam Power

WALDEN, N. Y.

TO THE EDITOR:

On page 739 of the November 6 *Railway Age,* you use the singular in describing a record run of Diesel locomotives on the B. & M. Knowing that you are a stickler for correctness, I would like to call your attention to the fact that this was a record run by probably four Diesel locomotives. If two steam engines are hooked together, it is a "double header," but four Diesel locomotives are "one engine." Why?

Not being a railroad man, but being very much interested in

the maintenance of private enterprise, I wonder if you will be so kind as to explain the economics of this proposition. If my figures are approximately correct, these four Diesel locomotives cost $550,000. I do not know what steam engines are being compared but would imagine they are of the Berkshire type which cost probably $120,000.

Two Berkshire engines would run away with 3,839 tons. "Big Boy," which cost probably $220,000, would think it was running light. One Berkshire with helpers at the proper points can handle most of the load. Any of the larger engines, such as the Poconos which cost approximately $140,000, would probably not need a helper, especially if equipped with a booster.

I have never been able to understand why the railroad cannot standardize locomotive construction. Every mechanical superintendent seems not only to have a different idea from his fellows, but a different idea every time he buys an engine. I do not think that the proposition that different railroads need different types of engines, holds water. I can see no practical reason that would prohibit the railroads from standardizing on about eight types.

I do not wish to infer that advance should be halted. As improvements came along, they could be incorporated in test engines to be tried by all the roads; and when the improvements had proven feasible, they could be incorporated in the next batch of engines, which should be not less than 100. To build engines in lots of 100, would greatly reduce both the first cost and the maintenance expense. Machine tool builders do not make up special designs for every customer. If they did, a turret lathe would be beyond the reach of most pockets.

Returning to the Diesel locomotive, reference is made to not stopping for water. The steam engines on the New York Central run from Harmon to Albany without stopping for water, and in the Southwest, most locomotives are equipped with "water cars." Furthermore, trains stop to change crews, to set out and pick up cars, and to inspect the train. Being able to run 186 miles without stopping, except in the case of fast passenger trains, is not a practical part of railroading.

I would also like to be informed as to what the situation would be today if all our railroads were equipped exclusively with Diesel locomotives. What will the situation be if our railroads equip themselves exclusively with Diesel locomotives and the threatened oil shortage actually develops?

Whereas you have touched on the Diesel locomotive in various articles, if you would publish a complete treatise on the economics of this subject, you might be able to prevent further encroachment by government on railroad management.

PAULSEN SPENCE.

An Employee's Views on Supervisors' Qualifications

NEW ENGLAND.

TO THE EDITOR:

After reading Mr. Horning's discussion of "Personnel Practices" in the November 6 issue of *Railway Age*, the thought came to me that some executive might care to know what an employee thinks of the lack of "personnel administration" on one of the large eastern railroads. May I present my own individual viewpoint on the subject?

First to consider is the attitude of the employee to the employer. He feels that he has a commodity to sell—his services; and that the buyer (employer) has as much right to expect that his commodity will perform the service for which it is used as well as any machine purchased for a specific job.

Would the purchasing agent say to a salesman, "Send me two dozen box-cars?" Yet, would that be any more silly than for a superintendent to say to his chief dispatcher, "Hire a dozen operators?" Operators should be chosen to specifications designed to secure the proper material for which they are intended, just as much as the box cars will be designed to fit the loads for which they are intended.

The majority of operator's jobs today require the selling of tickets or acting as freight agents, transacting business with the patrons of the road. If an applicant for employment is not the type to meet the public he should not be hired as an operator just because a dozen operators are needed. Would it not be better to suggest he enter a class of service where contact with the public may be avoided?

The proper person to whom this discussion should be addressed is an officer of the company of which the writer is an employee. When an employee does not know to whom to write to discuss a grievance or to offer a suggestion, this condition tends to give the employee the idea that nobody cares for him so why should he care for the company.

This discussion should not be addressed to the division superintendent. Being the employee's immediate superior, the superintendent should know his attitude and feeling toward the company.

A situation such as this does not make for the highest "morale" in an employee. Each employee should know to whom he could write and obtain a personal interview at his convenience, on his own time, yet without loss of pay, and be afforded an opportunity to discuss his complaints and ascertain the truth as to his chance for advancement, and receive suggestions so he can be of more value to his company—incidentally improving himself so as to merit promotion.

Subordinate officers who attempt to show an employee the correct way to perform a task, and who in so trying only advertise their ignorance, tend to weaken employee morale. Subordinate officers should be thoroughly trained before promotion so that there never will be any question which they cannot answer about the proper way to perform a task. An employee cannot respect, nor, unless he be a hypocrite, show respect for, a supervisor who he feels knows less than himself.

A superintendent might say, "I don't like the way that diner rides. We'll scrap it." A bulletin would soon tell of the appointment of a new superintendent. Yet, after investing an amount equal to the cost of a diner in the making of a dispatcher, a superintendent is allowed to let him go, because the employee felt "he could not acclimate himself to what is required of a dispatcher on that division." This scrapping of the investment in manpower should provoke the same censure on the superintendent as the scrapping of a piece of inanimate machinery.

The primary factor in retaining an employee is to give him a feeling that he is fairly treated and that the company is as pleased to have him for an employee as he is to work for them.

The day of serfdom has passed. The employee of today feels that the exchange of his services for a stipulated price is an arrangement which is of mutual and equal benefit to both parties and should be so treated.

OPERATOR.

New Book . . .

Universal Directory of Railway Officials and Railway Year Book, 1943-1944, compiled from official sources under the direction of the editor of the "Railway Gazette." 570 pages. 8½ in. by 5½ in. Bound in cloth. Published by the Directory Publishing Company Limited, 33 Tothill Street, Westminster S. W. 1., London, England. Price 20 shillings (approx. $4).

The current edition of this well-known reference book contains the same type of useful information that appeared in preceding editions. The publishers note that "within the limitations imposed by war conditions, the lists of railway officers have been revised, and the brief descriptions of the chief railway systems of the world, with the latest available financial results, include the most recent changes of which precise information is obtainable." Likewise, "the section relating to statistical and other information has been subjected to the same extensive revision as the remainder of the volume."

The book is divided into the usual sections; first, the information on railways in various countries; and second, the section on statistical and other information. This latter section contains some very useful information, such as the tables on the development of the world's railway mileage, principal gages used throughout the world, the world's longest railway tunnels, fast train runs, etc. Included also is a brief chronology of railway history and a railway bibliography, comprised mainly of British works.

The book contains the usual index to countries, general index and personal index of railway officers.

Railroads-in-War News

Fate of Business In Its Own Hands

Future hinges on whether state aid is sought or rejected by business leaders

"The volume of production, commerce, transportation and employment after the war, and the fate of private enterprise, will depend on the policies of both business and government, but mainly on the policies of business itself," so Samuel O. Dunn, editor of *Railway Age* and chairman of the Simmons-Boardman Publishing Corporation, told the Transportation Club of Springfield in an address on November 11. "There was opportunity for a long period of real prosperity after the last war. That the prosperity we had was so brief, so badly distributed and so largely illusory, and was followed by the worst depression in history and the New Deal, was due principally to policies of business itself, and to policies that it influenced government to adopt.

"Among the things that we must *prevent* if we are to have a prolonged period of post-war prosperity are: (1) Business and labor monopolies, excepting natural monopolies that should be strictly, equally and fairly regulated, (2) Government competition with private enterprise, (3) Government subsidization of any kind of business, and especially of any kind of private enterprise that competes with any other kind of private enterprise (4) Unnecessarily heavy taxation largely intended to equalize incomes, and thereby tending to prevent the increase and investment of private capital necessary to the expansion of production and employment.

"Radicals favor everything which I have said must be prevented, because they want to replace private enterprise with state socialism. Probably the most important question will be that of government spending. The amount of government spending that can be done without putting government 'investment' into competition with more and more kinds of private enterprise is strictly limited. And the more government spends, the heavier and more harmfully discriminatory taxation will be, the larger government debts will become, and the greater will become the danger of uncontrollable inflation—a danger, with a federal debt after the war of $250 billion to $300 billion, which will be very serious, anyway, and which will increase with every increase of the debt.

"Are business men facing such facts, and, consequently, advocating sound business and government post-war economic policies? Fortunately, many are; unfortunately, many are not. The government has made during the war a huge investment in manufacturing plants. Business is strongly opposed to government operation of these plants after the war, and to any use of them even by private companies involving subsidized competition with privately-owned plants, because this would tend toward 'socialization of the economy.'

"But before and during the war government has invested many billions in waterways, highways, airports and other means of transportation. Does business unanimously favor all who use these facilities for commercial transportation being required to pay all that their use of them costs, in order to reimburse the taxpayers for providing them and to stop subsidized competition with the privately-owned railroads? Does business unanimously oppose further government expenditures on means of transportation unless justified by proof that commercial carriers using them can and will pay enough for their use to avoid increasing the burden on the general taxpayer and to prevent increase of subsidized competition with the railways? Quite the contrary. No national business organization has yet advocated abolition of all government subsidization of competition with the railways. And some powerful business groups are energetically promoting huge government post-war expenditures that would increase taxes, increase government debts and increase subsidized competition in transportation.

"Socialistic policies which would tend to destroy prvate enterprise in manufacturing, just as certainly tend to destroy prvate enterprise in transportation. And it is wholly irrational to believe we can follow policies of socialization of some great industries and at the same time prevent socialization of others."

Would Give Ickes Full Control of Oil and Coal

Senator Reed, Republican of Kansas, has introduced for himself and Senators Clark, Democrat of Missouri, and Wherry, Republican of Nebraska, a bill to centralize all government functions relating to the production, transportation, distribution, sale, or price of petroleum, natural gas, and coal. The bill is S.1530.

It would centralize the petroleum and natural gas functions in the Petroleum Administrator for War and the functions with respect to coal in the Solid Fuels Administrator for War, both of which offices are now held by Secretary of the Interior Ickes. Among the functions listed for transfer to Mr. Ickes, in both cases are those now vested in the Office of Defense Transportation.

Vinson Is Adamant On Non-op Wages

Insists a straight eight-cent raise would make them "privileged group"

Passage of Senate Joint Resolution 91 to give Congressional approval to a straight eight-cents-per-hour wage increase for non-operating railroad employees will be notice to the country "that a privileged group is outside the stabilization program and is not to join in the battle against inflation," said Economic Stabilization Director Fred M. Vinson in a November 16 statement to the Senate interstate commerce subcommittee which has the resolution under consideration. Public hearings on the measure, sponsored by Senator Truman, Democrat of Missouri, and supported by the non-op unions, were held last week, as reported in the *Railway Age* of November 13, page 759.

Thus did Mr. Vinson reassert his opposition to an across-the-board increase as violative of the "Little Steel" formula in view of the December, 1941, increase which gave the non-ops a raise of more than the allowed 15 per cent. At the same time, the O.E.S. director cited his approval of graduated increases ranging from 10 to four cents an hour as recommended last week the "special emergency board" on the "substandard of living and interrelated job classification" basis.

"The critical question," he said, "is whether for some strange reason the law applicable to others is not applicable to the non-operating railway employees and their employers. We would be in an indefensible position, indeed, if privileged groups were exempted from the wage controls to which others must adhere. That would be the same as providing that one butcher must sell his limited number of steaks at O.P.A. ceiling prices while another butcher is free to charge whatever he can obtain."

Mr. Vinson denied that application of the stabilization program to railway wages had the effect, as claimed by the labor organizations, of suspending or altering the Railway Labor Act. "All that has happened," he said, "is that the wage dispute procedure of the Railway Labor Act has been supplemented with the stabilization standards applicable to all." And he suggested later that if Congress desires some change in the standards of wage stabilization, it should not exempt one group but should "write a formula applicable to all."

"Entirely erroneous," as Mr. Vinson sees it, is the view that the stabilization-against-inflation issue disappeared from the case

when it developed that the approved adjustment would result in an aggregate annual increase of only $18,000,000 less than a general eight-cent raise. He went on to mention another "relatively small consideration" that a general increase of eight cents for the non-ops "would probably necessitate upward revision for all of the operating employees"; and "the all important consideration" that in view of the December, 1941, increase "an across-the-board adjustment in any amount is violative of the 'Little Steel' formula."

The O.E.S. director had previously pointed out that under the stabilization program, "the only standard which allows a general flat increase over the level of September 15, 1942, is the 'Little Steel' adjustment." And he suggested that while "pressure exerted by organized labor groups to break the 'Little Steel' formula may be a new experience for Congress," it is not new "for those who have been doing the battle with inflation." Here are mentioned three of the largest cases in which the War Labor Board resisted such pressure which Mr. Vinson anticipates will be exerted "in hundreds of future cases."

Pointing out that most of the wage increase proposals which come to the government for approval present no dispute between employees and management, Mr. Vinson stated his disagreement with those who urge that when employers and employees agree (as is the case in the non-op proceeding) the proposed increase should be approved.

Wartime economy, he asserted, demands that all increases "be squared against the standards of the wage stabilization program."

Other parts of Mr. Vinson's statement describe and comment on the legislation and executive orders which form the basis of the stabilization program with its "general rule that there are to be no wage increases." Although he later noted the provisions for "a few exceptions," he nevertheless stated that the general rule "needs to be stressed, because some appear to believe that wage increases are still a part of the normal course of events."

"No one," he added, "claims that . . . wages from industry to industry or that all wages and all prices are in precise balance. We never had such conditions, and probably never will. The argument as to whose wages are out of line is a never-ending one. War is no time for each of us to devote his principal energies to improving his lot any more than war is the time for the government to undertake a program directed toward obtaining a perfect relationship between all wages. Instead, the government, by a general freeze of wage rates, has assured that the inequities present while we are engaged in war are to be no greater than those we had in peacetime."

In recounting the actions in the non-op case, Mr. Vinson came to his June 22 order staying the eight-cent increase, and broke into his story to say: "At the hearing it was suggested that in determining matters of this character, I do what the President wants me to do. I simply wish to say that in making this determination the President did not directly or indirectly communicate with me."

His precedent for undertaking to recall the Sharfman emergency board to reconsider the case was the recall of the Morse board to work out the so-called mediation settlement of December, 1941. In this instance, however, the Sharfman board refused to reconvene, and Dr. William M. Leiserson, chairman of the National Railway Labor Panel, "declined to designate a new board." Hence the President's action appointing the "special emergency board," which brought forth the sliding scale adjustment approved by Mr. Vinson. "At this point," Mr. Vinson said, "it is well to take note of one or two references in the record to the effect that everyone in the Executive Department would be glad to see this matter settled. It is settled. The question is whether Congress will unsettle it."

In another place Mr. Vinson said that "neither strikes nor wage rates set at what the traffic will bear are conducive to winning the war." Meanwhile, some Congressional supporters of the non-ops demand were reflecting a disposition to absolve the union leaders of responsibility for a strike, if one should come. Representative Rowe, Republican of Ohio, predicted that a strike will come unless the government listens to the non-ops petition, and he added "they will not be at fault." Representative Price, Democrat of Florida, inserted in the Congressional Record a letter he had written to Mr. Vinson with the following closing paragraph.

"If this country should be paralyzed in the near future by a strike involving all employees of the railroad unions I am sure we will have no one to blame but those in authority who have refused the just demands of this group of loyal American citizens. I believe the only way to prevent such a disaster will be to immediately give these men what they so justly deserve."

Other recent Congressional speeches and "extensions of remarks" on the controversy have come from Representatives Baldwin, Republican of New York, Coffee, Democrat of Washington, Domengeaux, Democrat of Louisiana; and Senator Langer, Republican of North Dakota. George M. Harrison, president of the Brotherhood of Railway Clerks, and Donald R. Richberg, counsel for the non-ops, stated their position in support of the Truman resolution in a nationwide broadcast under the auspices of the American Federation of Labor on November 14. The A. F. of L. announcer stated that the Federation "will give its full support to the railroad workers in their efforts to obtain a fair and equitable adjustment of their wage rates."

Eastman Fears Demand for Travel Rationing

Railroads were urged by Joseph B. Eastman, director of the Office of Defense Transportation, at a meeting of railroad passenger traffic officers and military transportation representatives at Chicago on November 16 to do all they can to forestall the rationing of passenger travel. The meeting was called to discuss passenger traffic in 1944, which it is anticipated will be 20 per cent heavier than in 1943. Mr. Eastman disclosed that there is a demand from various quarters for the rationing of passenger travel and urged the railroads, because of the infeasibility of rationing, to exert every effort to improve the handling of passengers and thereby forestall further demands for rationing which are likely to occur during the peak to come.

Navy Sets up a Rate Adjustment Section

A commerce section has been established in the Transportation Division of the Bureau of Supplies and Accounts of the Navy Department to act for the department in all freight classification and rate negotiations with carriers and in representations before the Interstate Commerce Commission and state regulatory bodies. The new section is in charge of Lt. Comdr. J. G. Cooper, who, before being commissioned in February, this year, was with the I. C. C., being an examiner in the Bureau of Formal Cases and subsequently assistant to the director of the Bureau of Motor Carriers.

Irving Joins Staff of W. P. B.'s Transport Savings

T. P. Irving, engineer of car construction of the Advisory Mechanical Committee of the Chesapeake & Ohio, Erie, Nickel Plate, and Pere Marquette, has been appointed assistant director of the War Production Board's Transportation Equipment Division in charge of the Rolling Stock Section. Mr. Irving is chairman of the committee on car construction on the Mechanical Division, Association of American Railroads.

Brewers Suggest Further Transport Savings

"A voluntary program to reduce by at least 10 per cent rail transportation required by the brewing industry in 1944" was the outcome of a recent meeting of the War Food Administration's Brewing Industry Advisory Committee, the WFA announced last week.

According to the announcement, the 10 per cent saving would be achieved by: Limiting shipments of beer to domestic markets in California, Oregon and Washington from Eastern states to 75 per cent of what was shipped in 1942; using inland waterways to the maximum; avoiding overly circuitous routing whenever possible; placing additional emphasis on practices which have already yielded savings, such as maximum loading of cars and expedited loading and unloading.

"Industry representatives" were reported in the WFA press release to have stated that 90 per cent of the railroad cars used in shipping beer are refrigerator cars, and that most shipments originate in the Middle West. "These refrigerator cars," the release

went on, "are loaded with fruit and vegetable produce" on their eastbound movement, the brewers "furnishing return loads." Also, it was stated that "empty bottles now move to the Pacific Coast to permit the packing of beer there for export use," whereas "the substitution of a haul of filled bottles would reduce westbound car movements."

Thomas Quits Fuels Post to Return to Burlington

Thomas J. Thomas, associate deputy of the Office of Solid Fuels Coordination and the Solid Fuels Administration for War, has resigned to resume his former positions of assistant to the president of the Chicago, Burlington & Quincy and president of the Valier Coal Company. Mr. Thomas had been in the government service since December, 1941, and he will continue to serve as consultant to Solid Fuels Administrator Ickes.

In announcing the resignation Mr. Ickes said: "To Mr. Thomas must go the main credit for getting American coal consumers to build the greatest stockpiles of coal in the history of the nation. The energy and foresight that he expended on this stocking program was responsible in great measure for maintaining the tempo of war production in 1942 and 1943."

Railroad Capacity Increased by Loading Westbound "Reefers"

During October 11,777 loaded refrigerator cars moved to the Pacific Coast, as compared with 5,454 in January, an increase of about 115 per cent, Director Eastman of the Office of Defense Transportation pointed out in a statement November 15 in which he called attention to the effect of Service Order No. 104 of the Interstate Commerce Commission in bringing about this substantial contribution to the ability of the railroads to handle an increased volume of war traffic. That order went into effect in January on a permissive basis, and was made mandatory September 1.

The decision to permit the substitution of refrigerator cars for box cars in the westbound movement was made in an effort to increase the westbound use of otherwise empty refrigerator cars, it was explained, and to utilize thus the only large remaining reservoir of unused freight car capacity. While the normal traffic in perishables requires a large movement of refrigerator cars into the East, it has been the practice to return such cars empty. At the same time, the O. D. T. statement adds, the large movement of war materials to the West Coast has resulted in an accumulation of empty box cars in that area, so that the use of refrigerator cars for the westbound transportation of manufactured products has had the effect of eliminating round trip empty car movements in the transcontinental service, and so relieving the heavily burdened western roads of the task of handling many empty cars and at the same time releasing large numbers of box cars for loading elsewhere.

Soldiers to Do Railway Work in Canada

Troops will be used in Canada to relieve the railways' shortage of manpower. Some limited assistance of this kind has already been forthcoming—and the practice has now been formally approved by the Dominion Cabinet. Soldiers to be assigned to this work are to come from those called up under the National Resources Mobilization Act, 1940, who have been given a limited service status by the medical examiners. Recent curtailment in the intensity of civilian defense activity makes a number of soldiers, heretofore assigned to home defense, available for necessary railway work.

Soldiers doing railway work will be paid currently on an Army basis, but will subsequently receive supplemental compensation. According to the Cabinet order, these Home Defense soldiers may be utilized for "development, operation, and maintenance" of the Canadian railways.

Clarification of Preference Rating Order P-142

The War Production Board on November 15 issued an amendment to Preference Rating Order P-142 clarifying inventory control features of paragraph "f" of the order which covers material entering into the operation of transportation systems.

The amendment to paragraph "f" states that "the foregoing inventory control does not apply to printed matter." It is thus designed to relieve railroads from the inventory control of P-142 over such printed matter as tickets, waybills, timetables, etc. The W. P. B. announcement also pointed out that MRO Priority Ratings should not be used to obtain printed material by reason of List "B" of Priority Regulation 3.

Materials and Prices

The following is a digest of orders and notices of interest to railways, issued by the War Production Board and the Office of Price Administration since November 1:

Class B Product Allotments—Direction No. 36 to CMP Regulation No. 1 provides that customers may make allotments to Class B product manufacturers in two instances: (1) Where the customer has obtained an allotment or material believing, in good faith, that he would make the product himself and finds that unforeseen contingencies prevent him from doing so. (2) Where the customer designs and engineers a product and it is his practice to subcontract for the production of all or a portion of products which he designs and engineers and the actual manufacturer is not in a position to anticipate requirements of materials or components for making it.

These two cases are exceptions to the general rule prohibiting allotments of controlled materials to Class B product manufacturers except by the WPB. However, when a customer desires to make an allotment of controlled materials to a supplier for the manufacture of a Class B product, he must satisfy himself that his supplier has neither applied for nor received an allotment to make the Class B product for him, and the supplier must not accept such allotments of controlled materials if he has either applied for or received allotments to make the product in question.

The direction also points out that applications for allotments must not include controlled material needed to make Class B products which will be incorporated in the product covered by the application, and that a customer must not make an allotment for a Class B product unless he has received an allotment covering such product.

Solder—General Preference Order M-43, as amended, November 3, relaxes restrictions on the tin content of solders where it has been found that higher tin content is necessary. Previously, this higher content could be used only upon the granting of an appeal. But under the amended order specific provisions permit higher tin content, in some cases above 21 per cent, for certain solders. Careful survey has shown that the higher tin content solders permitted will actually result in a saving of tin. The amended order also permits the reworking of block tin pipe.

Prices

Burlap Bags—Amendment 3 to MPR 151, (New Bags), effective October 30, provides slightly lower ceiling prices for new burlap bags in the western part of the country, slight increases in the middle section and near the ports where burlap is received. However, the general level of bag prices was not changed.

Grain and Coal Doors—Amendment 1 to MPR 483—("General Manager Type" Grain Doors and Temporary Coal Doors for Box Cars), effective November 12, provides a method for setting maximum prices for "general manager type" grain doors and temporary coal doors for box cars which do not have specific maximum prices under the regulation covering these commodities.

Doors constructed in different parts of the country are necessarily of various species of lumber; hence there is a differentiation in prices for various types of lumber. OPA has provided that maximum prices will be established for any item covered by the regulation, but not specifically priced, by application to the Lumber Branch, OPA, Washington, D. C.

Machines and Parts—Amendment No. 103 to MPR 136, effective November 3, clarifies the meaning of base date prices used by manufacturers, sellers and lessors to compute ceilings for new machinery and machinery parts.

MPR 136 froze "confidential list prices" in effect on the base date specified in the regulation. For the purpose of simplicity Amendment 103 establishes maximum prices by reference to "established prices" in effect on the applicable base date instead of confidential list prices.

Southern Pine—Amendment No. 8 to RMPR No. 19 (Southern Pine Lumber), effective November 15, provides a control-tightening action designed to halt the sales of Southern pine lumber at prices in excess of ceilings through the illegal device of upgrading. Beginning November 15, shipments of Southern pine boards, either dimension or finish material, which are not grademarked by a qualified inspection agency, and which contain more than 30 per cent of No. 1 common or higher grades, must be accompanied by inspection certificates. The certificates must be issued by qualified inspection agencies or inspectors recognized and accepted as such by a federal agency, such as the Central Procuring Agency, which buys lumber for military requirements. Without such a certificate, a shipment of lumber invoiced as No. 1 common or higher may not be sold at prices above those for No. 2 common.

"This certification is required to combat widespread violation of Southern pine price ceilings through the device of upgrading," OPA said. "The normal out-turn of No. 1 common and higher grades of lumber from a log of Southern pine ranges, by locality, from 5 to 30 per cent. However, some mills have been invoicing run-of-the-log shipments as containing from 50 to 60 per cent of No. 1 common and higher grades."

The ceiling price for No. 1 common shortleaf one-in. by 6-in. by 12-ft. boards, for instance, is $40 per M. b. m., f. o. b. mill, compared with a ceiling price of $37 per M. b. m. for No. 2 common boards of the same size. By upgrading a shipment, the higher No. 1 common price is obtained for lower quality material.

Stock Millwork Specialties—Amendment No. 1 to RMPR No. 293 (Stock Millwork), effective October 26, provides an increase in ceiling prices for stock millwork specialties made of Western and Northern pine lumber which raises individual ceilings for each manufacturer three per cent above the highest prices of October, 1941.

GENERAL NEWS

RRs to Hold Their Own in Postwar Era

Efficient service at low rates will meet all competition, says Judge Fletcher

Assuming that the government will return to its "legitimate function, without undue interference with private initiative and private enterprise," when the war is won, the railroads, by giving efficient service at lower rates than possibly can be met by other forms of transportation, will hold their own in fair competition for postwar business, said Judge R. V. Fletcher, vice-president of the Association of American Railroads, in an address November 15 before the Birmingham Traffic and Transportation Club at Birmingham, Ala.

The speaker emphasized his belief that the tendency of the times is away from "interference by the withering hand of government" and toward a "restoration of a political and economic system based on American traditions and fulfilling the American ideal of a people breathing the atmosphere of freedom, with little or no interference from the servants of privilege or the minions of bureaucracy."

As one recent development to indicate that "the American people have not lost their hold upon the fundamental principles which constitute the American way of life," Judge Fletcher remarked that he does not find that the public "is reacting with any degree of sympathy to recent childish attacks which have been made upon the railroads by a certain gentleman in high authority, who, speaking without knowledge of the subject, has seen proper to condemn the railroads because they have adopted plans and methods endorsed by the American people, approved by public authority and demonstrated by experience to be essential to the orderly handling of business. Seeds of discord, thus sown by politicians hoping to advance their fortunes, who undertake to discuss subjects with which they are not familiar at the instance of narrow-minded partisans, have fallen upon barren ground."

In any event, he concluded, "Those who are in charge of the railroads are conscious of their obligations, alert to their opportunities and filled with a sincere determination to serve our great democracy with renewed zeal and enthusiasm."

As a concrete example of such spirit, the speaker outlined the program of research undertaken by the railroads with a view to effecting changes in policy and availing themselves of technological developments so that they can continue to function effectively under postwar conditions. He referred not only to the work of the individual roads and of the A.A.R. Committee for the Study of Transportation and its various subcommittees, but also to the recently organized Department of Technical Research, which will undertake for the industry more fundamental studies in the following categories:

"A. Fundamental or basic research for the development of designs and processes not heretofore used or taken advantage of in railroad service; and the obtaining of specific facts or knowledge—metallurgical, chemical and physical—of materials or appliances for improvements in the service offered by the railroad industry.

"B. Applied or physical research for the improvement of materials, processes or appliances now in use.

"C. Specification and standardization research for further development of standards and specifications based upon research investigations.

"D. Appliance design and testing research to determine the acceptability, performance and economy of appliances used by the railroads.

(*Continued on page 846*)

Salaries Over $10,000 Take Only 0.7% of Payroll

One hundred and nineteen more railroad officers received annual salaries of $10,000 or more in 1942 than in 1937, but the average compensation of the group was off from 1937's $17,476 to $17,316 last year, according to the latest statement summarizing annual-report returns which has been issued by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics. The statement is No. 4364.

It shows that the total 1942 compensation of the $10,000-or-more group was $21,264,349 or 0.7 per cent of the total 1942 payroll of all Class I roads and switching and terminal companies, including 26 which reported no salaries of $10,000 or more. A total of 1,228 officers received $10,000 or more in 1942 as compared with 1,158 in 1941 and 1,109 in 1937.

Six hundred and forty officers, or 52.12 per cent of the 1942 group fall into the $10,000-$14,999 class; and these received 34.8 per cent of the whole group's total compensation. Twenty salaries of $60,000 or over were reported. They aggregated $1,370,000 or 6.44 per cent of the total paid the $10,000-or-more group. More than 85 per cent of the group were paid less than $25,000, only 181 being above that figure.

Wallace Continues Anti-RR Demagogy

Refuses to correct misstatements and says he will utter more of same

Vice-President Wallace has issued a statement in reply to the Transportation Association of America's recent letter characterizing his Dallas, Tex., address as "the most distorted representation of the true public interest in the transportation problems which has ever been uttered by a high public official of this country." The T. A. A. letter was noted in the *Railway Age* of November 13, page 775. In a rejoinder to Wallace, the Transportation Association shows wherein he continues to misrepresent that organization's position.

The Wallace reply was issued on November 9 and inserted in the November 12 issue of the Congressional Record by Senator Stewart, Democrat of Tennessee. Previously Mr. Stewart had inserted in the Record a letter which C. E. Childe, member of the Transportation Board of Investigation and Research, had written to Mr. Wallace, telling the Vice-President that in the Dallas speech "you said many things about freight rates which needed to be said for the public good."

Citing the 1938 report of the so-called Wheeler investigation of railroad finances, Mr. Wallace asserted that the Transportation Association "was organized by individuals closely associated with the Association of American Railroads, and for the purpose of providing a 'neutral,' 'independent,' and 'unbiased' vehicle through which the Association of American Railroads might express its views to the public."

"From this report," the Vice-President went on, "it appears that the Transportation Association has submitted its materials to the Association of American Railroads for criticism and change, and that the Association of American Railroads has submitted its materials to the Transportation Association for publication. Thus though it would appear that the hands are the hands of Esau, there is no mistaking the fact that the voice is that of Jacob.

"The Transportation Association claims authorship of the program to establish integrated transportation systems. That the record may be complete, it should be understood that after the Transportation Association's plan was presented to the government's Board of Investigation and Research, spokesmen for the Association appeared and endorsed the plan. Though the Transportation Association proclaims that its plan would preserve competition,

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it would, in fact, destroy the only effective competition in transportation which still survives, that between different forms of transportation. The railroads have successfully eliminated competition in rate making among themselves. Give them control of highway, water and air carriers, and they would eliminate all competition in rate making. I shall take occasion at the earliest opportunity to express myself more fully in regard to the plan for seizing control of all forms of transportation which has been advanced through this Association."

[The T. A. A. plan was presented by the Association's executive vice-president, Donald D. Conn, at July, 1942, hearings in connection with the Board of Investigation and Research's study of public aids to carriers, as reported in the *Railway Age* of July 11, 1942, page 58. No A. A. R. witness appeared at the hearings to endorse the plan; while an A. A. R. brief filed subsequent to the hearings merely took a position, like that embodied in the recent resolution of the A. A. R. board of directors, that railroads should have equality of opportunity with others to enter the fields of air, highway, and water transportation.]

Addressing himself to the T. A. A. suggestion that his Dallas speech was ghosted by Thurman Arnold, Mr. Wallace conceded that he had read the record of the rate-bureau hearings before the Senate committee on interstate commerce, "including Judge Arnold's statement." He went on to recommend that "every American citizen read the report of these hearings—read both sides of the controversy—and then judge for himself how monopoly influences dominate the fixing of transportation charges."

His own study of transportation, the Vice-President added, began before he ever held public office. He referred to testimony he has given in rate proceedings before the Interstate Commerce Commission; and how he made "a particular study of transportation" while Secretary of Agriculture, presenting to the Senate committee on interstate commerce views in which the then Secretary of War and the chairman of the Maritime Commission concurred. [This was the letter in which Mr. Wallace, former Secretary of War Woodring, and Admiral Land opposed the water-carrier regulatory provisions of the Transportation Act of 1940.]

In view of his long interest in the matter, Mr. Wallace was "delighted" when Judge Arnold and the Antitrust Division "took up the cudgels and developed the facts which substantiate and support the efforts of myself and others to inject a true public interest concept into our national transportation policy." Dealing with the T. A. A. complaint that he offered no solution for the ills of the transportation industry, Mr. Wallace dismisses it as a "misstatement" which "ignores the specific recommendations made in my Dallas speech."

B. I. R. Member Childe's letter to the Vice-President dealt entirely with the rate-discrimination allegations of the Dallas speech. As Mr. Childe sees it, the freight-rate structure "is a mass of discrimination." He conceded that the I. C. C. has made some progress in eliminating or modifying many individual discriminations, but added that "regional discriminations, discriminations between localities and between commodities, and growing out of competition between different types of carriers, permeate and dominate the rate structure today."

Mr. Wallace's charge that carrier rate bureaus are responsible is "partly true," Mr. Childe said; but "the main responsibility lies with Congress, which controls rate-making policy and with the Interstate Commerce Commission which has authority to fix rates." He therefore called for enactment of pending uniform-rate legislation based on the recommendations of the B. I. R.'s interterritorial freight rate report.

Charges made by Vice-president Wallace in a press statement on November 10 that the Transportation Association of America was organized and financed "by individuals closely associated with the Association of American Railroads" were denied by Donald D. Conn, executive vice-president of the Transportation Association in a statement made at Chicago on November 11.

"Completely evading the misstatements of his Dallas address of October 20, failing even to refer to, much less to explain or justify, his distortion and misquotation of this association's transportation policy, Vice-President Wallace, in his press statement of November 10, again resorts to misrepresentation by erroneously charging the Association of American Railroads with the conception and organization of this association," Mr. Conn declared. "The Vice-President charges that this association was organized and financed 'by individuals closely associated with the Association of American Railroads.' By a tricky play of words, Mr. Wallace covers the waterfront in this statement.

"He carefully refrains from charging the Association of American Railroads, by any of its actions, informal or otherwise, with the origin of this association, but the intent of his statement represents a deplorable implication. All shippers, investors, individuals in all walks of life—in fact, every interest concerned in efficient and economical transportation is, or certainly should be, 'closely associated' with the Association of American Railroads.

"Many of these varied interests did sponsor the Transportation Association of America. Its organization committee was composed of the president of one national farm organization and the executives of three large manufacturers and two insurance companies. Railroads are minority members of this association, just as they are members of trade groups and Chambers of Commerce throughout the United States. The association does not hold itself out to represent a particular interest or to express opinions in behalf of any segment of its membership. It is dedicated solely to the public interest in the determination and adoption of a sound transportation policy which will preserve this industry in private ownership. Its structure and functions were designed to carry out a recommendation of the Joint commission of the Sixty-seventh Congress.

"Peculiarly enough, the Vice-President now detours from his phantom charge at Dallas of 'regional monopolies,' and takes up the cudgels in support of compelling competition between modes of transportation—of continuing a national policy which leads straight down the road to government ownership. Is this what Mr. Wallace wants?

"In effect, the Vice-President emphasizes that national policy should continue to encourage all of the wastes and duplications inherent in such an application of the competitive principle. After floundering about, he finally arrives at the real issue: He favors competition between modes of transport, with the public paying the bill for excesses in their freight rates.

"The Transportation Association of America advocates a long-term objective of national policy which would apply the competitive principle between systems of common-carrier transportation, just as is now permitted and encouraged in private transportation and among common carriers in the Dominion of Canada.

"The Association has long urged that Congress undertake a complete overall study of the entire domestic common-carrier transportation problem before enacting legislation treating with any one mode of transport—without giving due consideration to the effect thereof upon the services and financial position of other modes.

"Inadvertently or otherwise, Mr. Wallace has brought the issue into the open. No doubt he would support the creation of a Joint Commission of Congress, composed of members of the House and Senate committees, who now deal with various parts of the problem, to re-appraise national policy completely, as this association has suggested. If so, this association would see eye to eye with Mr. Wallace on the first step."

N. & W. Has Get-Together By Radio

In the third of a series of wartime "meetings via radio", 23,000 Norfolk & Western employees listened to a system-wide broadcast on November 15. Nineteen radio stations throughout six states—West Virginia, Tennessee, Ohio, North Carolina, Maryland and Virginia—broadcast a 30-min. program, in which listeners were taken "behind the scenes of railroading" at the main shops in Roanoke, Va.

During the tour of the plant, there were several "on-the-job" interviews with shop craftsmen engaged in building locomotives and in keeping equipment in repair. At the close of the program, President W. J. Jenks was interviewed by Tom Slater, radio announcer and director of special events for the Mutual Broadcasting System. Music was furnished by the Roanoke Shops' Band and Negro Male Chorus.

Background sound effects were authentic, with steam hammers and riveters, the roar of furnaces melting steel and of cranes lifting locomotives being heard. There were descriptions of a locomotive being assembled "from the ground up", of a locomotive driving wheel being made from molten steel and poured into moulds, and of steel being tested in the railway's physical laboratory. There

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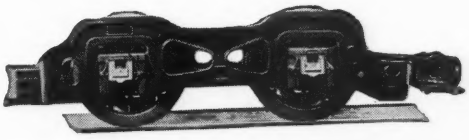
Booster Power

KEEPS TRAFFIC MOVING



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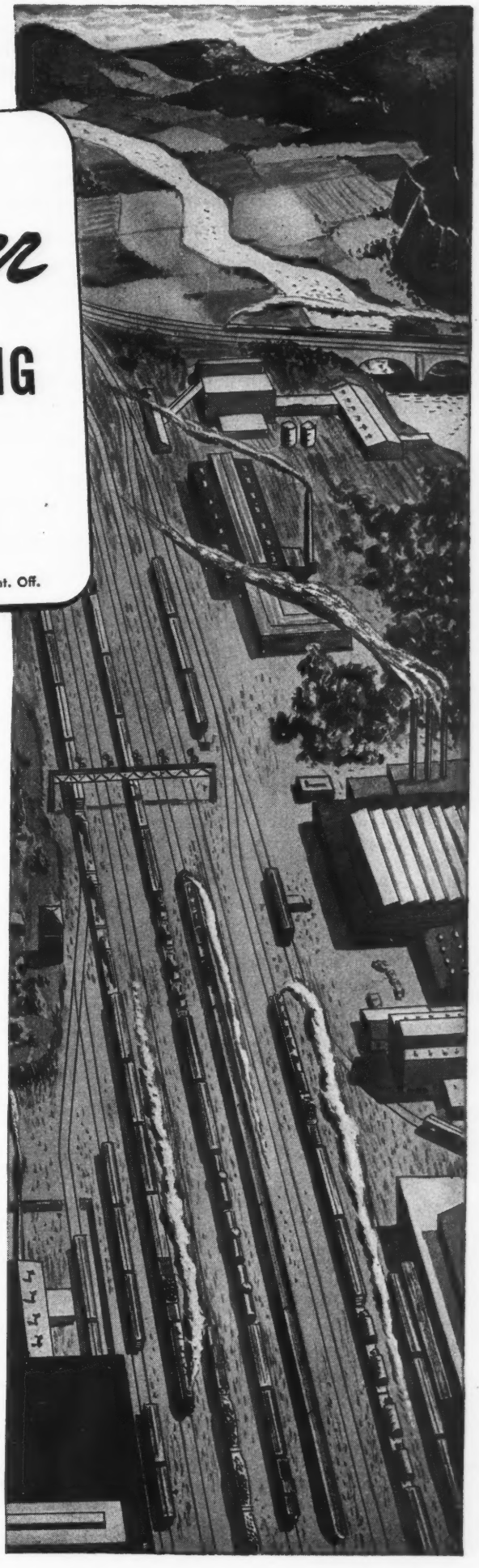

The Booster* gets heavy trains in and out of sidings in half the time. Its added power gets you out of any tight spot.

Veteran engineers call the Locomotive Booster a friendly ally and bear witness to hundreds of instances where its extra power has speeded up wartime traffic.

The Locomotive Booster makes everything else more productive.

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

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***In Canada:* FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL**

was an interview at the assembly line in the freight car shop where heavy repairs are made to coal cars, at the rate of 16 every eight hours.

President Jenks described the work done in the shops since the start of the war in Europe in 1939. There have been, he said, 52 locomotives designed and built by shop employees, 19 others modernized, and heavy repairs made to 1,444 more. In addition, 20,550 coal cars have received heavy repairs and 85 locomotives of other roads have been completely overhauled. Mr. Jenks observed also that the N. & W. is handling present war traffic with 412 fewer engines than in World War I.

October Employment 3.49 Per Cent Above October, 1942

Railroad employment decreased 0.49 per cent—from 1,374,485 to 1,367,817—during the one-month period from mid-September to mid-October, but the October total was 3.49 per cent above the comparable 1942 figure, according to the latest summary of preliminary reports prepared by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics. The index number, based on the 1935-39 average as 100 and adjusted for seasonal variation, was 129.7 for October, compared with September's 131.5 and October, 1942's 125.3.

October's decline under the previous month was due entirely to the 3.22 per cent drop in the maintenance of way and structures group. All other groups showed slight increases ranging from 0.18 per cent to 1.03 per cent. Likewise, all groups save maintenance of way and structures (down 3.57 per cent) were above October, 1942. These increases over the previous year ranged from 2.44 per cent in train and engine service to 8.56 per cent in the transportation group embracing yardmasters, switch-tenders and hostlers.

Build Warehouses to Protect Against Jamming Ports

Twelve warehouses, connected with 41 miles of railroad track, are being constructed by the government at the Transportation Corps holding and reconsignment point and the Army air force depot at Auburn, Wash., to relieve congestion at ports of embarkation, pier heads and railroad yards throughout the country. The buildings measure 200 ft. by 835 ft. and have a combined floor area of 2,000,000 sq. ft.

Date of Through-Routes Order Again Postponed

The Interstate Commerce Commission has further postponed from December 17 until March 17, 1944, the effective date of its order in the No. 28647 proceeding wherein it interpreted the Transportation Act of 1940's through-routes provisions, finding authority thereunder to prescribe routes that short-haul participating railroads if it determines that better service to shippers would result.

The order prescribes routes through Hagerstown, Md., which short-haul the Pennsylvania, and the postponement came at the request of the United States District Court of the District of Maryland where the P.R.R. is seeking an injunction. The commission's decision was reported in the *Railway Age* of April 3, page 686, while its refusal to reconsider was noted in the issue of October 16, page 614.

A Railroad Man Advises Industry on Research

Reversing the customary routine whereby spokesmen for industry not infrequently lecture the railroads on their need for more intensive research, Sir Harold Hartley (vice-president of the L. M. S. Railway in Britain) has addressed a pamphlet to British industry, in which his readers are admonished to engage more strenously in research—to the end that British products may hold their own in post-war international competition.

He points out that "natural genius and craftsmanship" gave Britain industrial supremacy in the XIX century but now "the easy inventions and obvious developments have already been made. Nature now only yields her further secrets as a result of much more prolonged and careful searching." He then offers practical advice on necessary procedure for firms wishing to embark upon technological research.

The pamphlet is entitled "Are You Research Minded?" and is published by the Federation of British Industries, 21 Tothill street, London, S.W.1

Planning for Florida Canal

Representative Dondero, Republican of Michigan, extended his remarks in a recent issue of the Congressional Record to complain that the chief of engineers of the Army has recently allocated $1,000,000 for the purpose of preparing plans to build the Florida barge canal, "for the construction of which no money has yet been appropriated by Congress."

The $1,000,000 thus allocated, Mr. Dondero pointed out, was one-third of the $3,000,000 provided in the War Department Civil Functions Appropriation Bill for the fiscal year 1944 for the purpose of having the Corps of Engineers prepare plans and specifications on waterway projects to be constructed in the post-war period. At the same time he recalled that the House committee on appropriations had refused to include in the same bill a proposed appropriation of $44,000,000 for the canal and that President Roosevelt had shortly afterward written Chairman Mansfield of the House committee on rivers and harbors to assure him that the Florida canal plans would be prepared so that construction could proceed without delay when materials and manpower became available.

Mr. Dondero "cannot believe" that General Robins, acting chief of engineers, would allocate the $1,000,000 to Florida canal planning "unless he had authority to do so from the President of the United States." Meanwhile he doubts that Congress has delegated power and authority "to the extent that the Executive can proceed with projects regardless of appropriation by the people's representatives." The people, he added, "will not approve the method I have set forth of forcing through projects regardless of their chosen representatives in the Congress of the United States."

Water Carriers Seek Hearing on Their Classification

A petition has been filed with the Interstate Commerce Commission by certain water carriers asking for the institution by the commission of a general proceeding under the provisions of section 304(c) of the Interstate Commerce Act for the purpose of establishing "just and reasonable" classifications, as required by the nature of the services performed, of groups of carriers included in the terms "common carrier by water," and "contract carrier by water."

The petition was filed by the Detroit & Cleveland Navigation Co., the Great Lakes Transit Corp., and the Nicholson Universal Steamship Co.

Southwestern Lines Oppose New Land Grant Agreement

A restraining order and final injunction enjoining certain Eastern railroads from establishing a new freight land grant equalization agreement, covering division of revenue between Eastern and Southwestern roads derived from government military and naval freight moving under joint land grant rates, is sought in a suit filed in United States District Court at St. Louis, Mo., by the Missouri Pacific, the St. Louis-San Francisco and the St. Louis Southwestern. Defendants named in the petition are the Baltimore & Ohio, the New York Central and the Pennsylvania.

In 1939, the Interstate Commerce Commission prescribed a formula for the division of revenue from all traffic moving under joint rates between Southwestern and Official classification territories, and on April 1, 1940, pursuant to this order of the commission, the Southwestern and Eastern carriers entered into a written contract known as the "joint division sheet," fixing percentages to be used in dividing revenue from traffic moving between points in the two territories.

When railroads execute land grant equalization agreements with the War and Navy departments, the petition states, they jointly and severally assume the responsibility which attaches thereto, including dividing of reduced rates on an equitable and lawful basis; and, inasmuch as these equalization rates were in full force and in effect at the time of the commission's decision, it is alleged in the petition that the land grant rates over the equalizing routes constitute joint rates within the meaning of the contract entered into on April 1, 1940.

A controversy exists between the Southwestern and Eastern lines regarding the division of revenue from this government freight, and the three railroads in St. Louis, filing suit, state they are dividing the revenue from such traffic according to percentages published in the joint division sheet, "while the defendants are not doing so." The petition alleges they "are divid-

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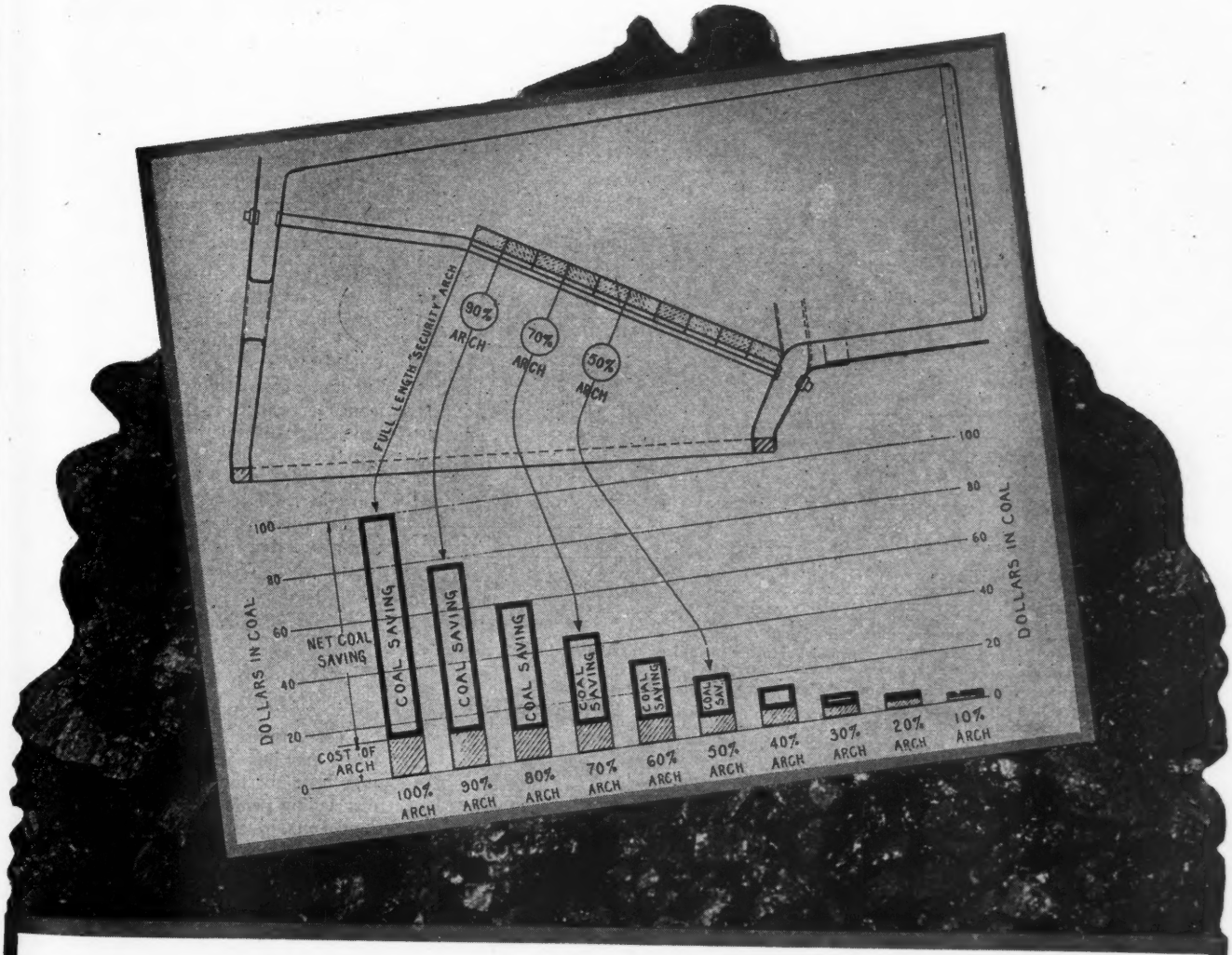
KEEP FUEL-BURNING EFFICIENCY AT A MAXIMUM

Every railroad man is conscious of the wartime importance of each pound of coal.

To make it yield its utmost in steam production is imperative. This is one of the functions of the Security Sectional Arch.

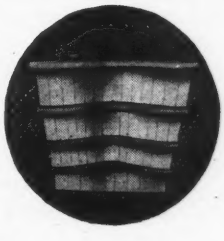
But only a complete arch can achieve the maximum in results. Hence the importance of having full length arches in all locomotives.

This is one sure way of stepping up fuel-burning efficiency.



HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.
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Locomotive Combustion Specialists

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 132 reports (Form IBS) representing 136 steam railways by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways — For the month of August 1943	For the month of August 1942	For the eight months of 1943	For the eight months of 1942
1. Net railway operating income	$124,561,490	$135,928,941	$948,083,690	$821,238,002
2. Other income	14,274,199	11,865,873	108,314,763	100,527,967
3. Total income	138,835,689	147,794,814	1,056,398,453	921,765,969
4. Miscellaneous deductions from income	2,558,701	2,229,941	19,506,553	19,745,690
5. Income available for fixed charges	136,276,988	145,564,873	1,036,891,900	902,020,279
6. Fixed charges:				
6-01. Rent for leased roads and equipment	13,616,426	16,424,349	115,581,966	117,218,280
6-0-. Interest deductions[1]	35,748,942	36,835,441	289,330,996	295,741,726
6-03. Other deductions	117,888	118,495	982,966	941,571
6-04. Total fixed charges	49,483,256	53,378,285	405,895,928	413,901,577
7. Income after fixed charges	86,793,732	92,186,588	630,995,972	488,118,702
8. Contingent charges	2,322,067	2,207,121	18,153,239	17,962,309
9. Net income	84,471,665	89,979,467	612,842,733	470,156,393
10. Depreciation (Way and structures and Equipment)	26,487,643	22,865,507	210,517,728	160,457,537
11. Amortization of defense projects	11,106,167	7,683,933	88,975,702	48,723,819
12. Federal income taxes	147,325,875	94,398,221	959,076,614	460,808,957
13. Dividend appropriations:				
13-01. On common stock	16,886,352	13,395,377	86,416,455	74,667,407
13-02. On preferred stock	4,145,894	4,250,586	19,709,267	18,334,461
Ratio of income to fixed charges (Item 5 ÷ 6-04)	2.75	2.73	2.55	2.18

Selected Asset and Liability Items	All Class I Railways — Balance at end of August 1943	Balance at end of August 1942
20. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	$559,340,121	$506,315,301
21. Cash	1,346,109,157	964,665,835
22. Temporary cash investments	1,352,009,432	333,041,772
23. Special deposits	166,226,319	134,700,258
24. Loans and bills receivable	277,899	1,011,077
25. Traffic and car-service balances—Dr.	39,464,878	39,263,369
26. Net balance receivable from agents and conductors	175,978,455	134,699,936
27. Miscellaneous accounts receivable	609,957,744	354,304,899
28. Materials and supplies	524,734,449	529,977,852
29. Interest and dividends receivable	20,320,312	19,099,102
30. Rents receivable	1,318,545	1,121,295
31. Other current assets	54,774,093	12,210,102
32. Total current assets (items 21 to 31)	4,291,171,283	2,524,095,497
40. Funded debt maturing within 6 months[2]	*$153,373,276	$110,145,858
41. Loans and bills payable[3]	15,528,192	16,851,751
42. Traffic and car-service balances—Cr.	152,496,270	98,875,983
43. Audited accounts and wages payable	409,266,856	338,744,727
44. Miscellaneous accounts payable	114,598,924	60,395,977
45. Interest matured unpaid	38,990,839	35,320,328
46. Dividends matured unpaid	6,800,582	6,191,808
47. Unmatured interest accrued	71,961,352	78,056,240
48. Unmatured dividends declared	22,957,520	18,427,603
49. Unmatured rents accrued	23,761,957	22,848,706
50. Accrued tax liability	1,615,161,891	756,787,733
51. Other current liabilities	72,792,070	58,025,831
52. Total current liabilities (items 41 to 51)	2,544,316,453	1,490,526,687
53. Analysis of accrued tax liability:		
53-01. U. S. Government taxes	1,452,073,686	610,682,455
53-02. Other than U. S. Government taxes	163,088,205	146,105,278

[1] Represents accruals, including the amount in default.

[2] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.

[3] Includes obligations which mature not more than 1 year after date of issue.

* Includes $49,000,000 of Delaware and Hudson Railroad Corporation funded debt which matured on May 1, 1943. The extension of the maturity of this debt is under consideration in a debt adjustment plan.

(Subject to revision.)

ing the revenue under the method used by them prior to April 1, 1940."

Pointing out that both the Southwestern and Eastern lines transport a vast amount of military and naval property under what is called "land grant deductions," which is, in effect, reduced rates for the government, the Eastern and Southwestern railroads, the petition states, agreed to equalize the lowest rate to the Government which might apply over a land grant route. The land grant route might be circuitous and, in order to speed Army and Navy traffic to destination, the Eastern and Southwestern railroads agreed to accept the lowest land grant rate. It is further alleged that these equalized land grant rates constitute joint rates within the meaning of the contract, for the reason that the base of the Government rates is the commercial rate less land grant deductions.

The petition alleges that the Eastern lines, by depositing with the War Department, effective January 1, 1944, a new freight land grant equalization agreement in which they have incorporated a new section covering division or apportionment of revenue from government freight moving over non-land grant, or equalizing routes, are "attempting thereby to change the divisions of said land grant rates agreed to with plaintiffs without the mutual consent of all the parties thereto."

The petition requests the court to nullify the new provision filed by the Eastern lines for division of revenue of government freight; to order that such division of revenue shall be determined according to the existing contract between the Eastern and Southwestern lines, and that the three Southwestern lines bringing the action "be accorded such further and other relief as they may be entitled to under the law."

It is estimated that the suit involves upwards of $2,000,000.

President Signs Truck-Forwarder Rate Extension Bill

President Roosevelt has signed H. R. 3366, the recently-enacted bill to extend for 18 months the period during which forwarders are required to discontinue joint-rate arrangements with motor carriers and shift over to the use of assembling and distribution rates published by the carriers. Without the extension, the deadline would have been November 16.

"Andrews' Raid" Featured in R. & L. H. S. Bulletin

"Andrews' Raid", a ballad, by Carrie Weaver Smith, is one of the highlights of Bulletin No. 62 of the Railway & Locomotive Historical Society, Inc., Boston, Mass. The story of Andrews' theft of the locomotive "General" and the chase by the "Texas" is told in verse for the most part. However, the author died before finishing the ballad and it is completed in prose by Richard W. Hogue.

A rather extensive and well-illustrated article on Atlantic type locomotives, by Paul T. Warner, is another highlight of this Bulletin. Other articles are those on Von Gerstner and our first locomotives; the Carlton & Coast railroad; the Bath & Hammondsport railroad; the story of Emma Nevada Kimball (this being a letter supposedly-written by the locomotive to "Miss C. P. Huntington", the locomotive who told her story in Bulletin No. 61); an unusual memorial window (a description of the memorial window to Wisconsin Central locomotive No. 28 in the First Methodist Church of Stevens Point, Wis.); and corrections and additions to the Pittsburg, Shawmut & Northern locomotive roster.

Western Roads Shorten Advance Period for Reservations

Reservations for a trip on Western railroads may be made for use only in the same month or the month following, as a result of a ruling made effective on Western railroads on November 15. Under the ruling, for example, a reservation may be made on any of the remaining days of November for a trip up to and including December 31. On November 30, however, the period for which a reservation might be made would still be limited to December 31. On December 1, reservations can be made for use on any day in that month or January.

In commenting upon the ruling, H. W. Siddall, chairman of the Trans-Continental and Western passenger associations said, "While the action of Western lines brings passenger reservations under country-wide limitation, the Western system of current and following month differs from the flat 30-day limitation imposed by Eastern lines on October 15 because of the problems pe-

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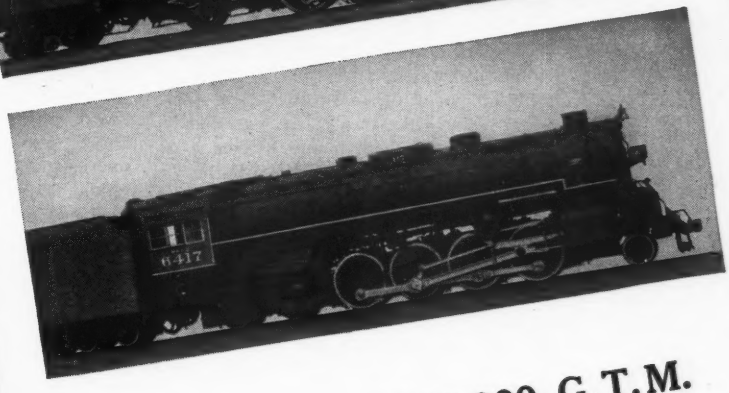
A NOTABLE RECORD



1918	15,292,000 G.T.M.
1942	48,928,000 G.T.M.

. . . an increase of 319% in gross ton-miles. The modern steam locomotive with small flue boiler and Elesco superheater provides the increase in evaporation and superheat that was not available in 1918.

Modern steam locomotives are equipped with modern design Elesco superheaters.

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culiar to Western travel. Where distances are longer, travelers of necessity plan longer trips and therefore make train and hotel reservations farther in advance. It is believed that the Western railroads' reservation system will meet this need. The innovation is an experimental one, and changes and adjustments may be found necessary."

State of R. F. C.'s Accounts with Railroads Disclosed

In an announcement November 16, Jesse Jones, Secretary of Commerce, disclosed that the Reconstruction Finance Corporation, since it began operating in February, 1932, has disbursed in loans to railroads and in purchases of railroad securities issued in connection with the Public Works Administration program a total of $1,050,203,675, of which $643,216,064 has been recovered either through repayments or sale of securities.

Rules of Motor Carriers of Household Goods

Prescription of additional rules and regulations to govern the practices of motor common carriers of household goods has been recommended to the Interstate Commerce Commission in a proposed report by Examiner A. S. Parker. The proposed report comes out of the further hearing in the Ex Parte No. MC-19 proceeding, and it would expand the regulations previously prescribed therein.

The proposed additional rules would govern practices in connection with the insuring or undertaking to insure, or procure insurance of shipments; giving estimates of cost for transportation and accessorial services; and collecting dock charges. The examiner referred to "numerous complaints" which indicated the need for the additional rules. "By far the greatest number" of such complaints arise "in connection with estimates of charges," sometimes "purposely made low in order to obtain the transportation contract;" but including no advice to the shipper that "the actual charges may only be determined after the shipment is weighed."

"Uniform" Freight Rates

Another letter which supports his view on the interterritorial freight rate controversy was inserted in the appendix to the November 15 issue of the Congressional Record by Senator Stewart, Democrat of Tennessee. It came from John P. Ferris, director of the Tennessee Valley Authority's Commerce Department, and the cost of including it in the Record was $105, according to the estimate Mr. Stewart received from the public printer.

Mr. Ferris asserted that "the existence of large and discriminatory inequities have been completely proved by thorough research studies conducted by impartial public agencies." He identified the latter as T. V. A. and the Transportation Board of Investigation and Research.

"The T. V. A.," Mr. Ferris went on, "has concluded after some nine years of consideration of this problem that the existing regionalization of class rates is in fact one of the important barriers to the development of manufacturing in the interior parts of the country in general, and in the South and inland West in particular."

In concluding, he found that "the case for a nationally uniform system of class rates rests on three propositions," as follows: "First, no other system will mete out even-handed justice to individual business enterprise. Second, no other system will confer equality of opportunity among the several regions to make full use of their resources. Third, a nationally uniform system would promote greater production and greater prosperity in every region."

Would Take Some of Chaos Out of Motor Tariffs

Efforts of Trunk Line and Central territory motor carriers to follow the rail classification, while at the same time publishing so-called minimum class-rate stops to avoid the adoption of rail rates regarded as unremunerative, have produced chaotic tariff conditions which call for prescription by the Interstate Commerce Commission of a uniform basis of stops to govern the situation as an emergency measure, pending development by the carriers or prescription by the commission of reasonable motor carrier class rates.

Such is the view of Examiner H. C. Lawton who has made a proposed report in No. MC-C-360, Minimum Class-Rate Restrictions—Central and Eastern States. The basis of stops which the examiner would have the commission prescribe is calculated to result in rates yielding, for single-line hauls, an average revenue for all distances of about 2.75 cents a ton-mile on truckload traffic, and about 3.5 cents a ton-mile on less-than-truckload traffic. He calls for higher bases on joint traffic, but insists that these "should reflect, insofar as possible, a fairly uniform relation to the single-line stops."

The stops, as the examiner explains, are "tariff items, rules, or methods of publishing class rates of motor common carriers, whereby, either through failure to publish in a tariff having general application any rate lower than a certain class, as, for example, fourth class, or by specific provisions providing for the application of certain class rates as minima, the participation in the tariff class rates, charges, rules, and regulations by motor common carriers is restricted."

He points out that the chaotic conditions have come about because the stops published in the agency tariffs of general application "have been ignored generally by the individual carriers, particularly in recent years, and the tariffs have become congested with numerous individual stops making a determination of the applicable rate on a particular shipment extremely difficult." The Eastern Central Motor Carriers Association and the Middle Atlantic States Motor Carrier Conference, Inc., "were most cooperative in describing the chaotic conditions in the agency tariffs due to the publication of the numerous individual stops"; and they offered to try again with "so-called uniform bases of stops."

The examiner rejected these proposals, however, and worked out his own, as noted above. At the same time he would take care of individual situations by having his basis prescribed without prejudice to the filing by individual carriers of "scales or arbitraries, or other methods of obtaining increased charges, for application over their lines, to be observed in addition to the bases of class-rate stops prescribed herein."

The proposed report assailed the rate-stop system as "a constant threat to a just, reasonable, and stable rate structure through increases, many of them unwarranted, in the rates of carriers made by individual exceptions to the agency tariffs." But "despite the abuses and violations of the act," it was apparent to the examiner that the "emergency measure" which he recommends is necessary. He anticipated that the need for stops may be eliminated if a rate structure adapted to motor transportation comes out of the commission's pending Ex Parte No. MC-C-200 investigation of motor carrier class rates.

A Light Shining in the South's Darkness

Alvin Vogtle, manager, traffic and sales, DeBardeleben Coal Corp., Birmingham, Ala., has made himself a committee of one for the dissemination of realistic knowledge on the relationship of freight rates to prosperity in the South—a voice crying in the wilderness of local misunderstanding, created by the political attack of T. V. A. and the Southern governors on the rate structure which has contributed so much to the South's development.

Mr. Vogtle's comprehensive expression on this subject some months ago, in a pamphlet published by Vanderbilt University, will be recalled. He has now authored another pamphlet—being the content of a Nashville Rotary Club address on November 2—in which the subject is further analyzed.

Quite contrary to repressing the economic development of the South, the present rates—product of years of business experience—are shown to have actively fostered Dixie's enormous advance in relative economic well-being.

I. C. C. Affirms Findings on H. & M. Fares

Making its second report on further hearing in the I. & S. No. 4394 proceeding, the Interstate Commerce Commission has affirmed its previous decision authorizing the Hudson & Manhattan to establish for the period of the war and six months thereafter a local fare between Jersey City, N. J., and Hoboken and Hudson Terminal, New York, on the basis of 11 tokens for $1 or a cash fare of a dime. Likewise affirmed is the condition, requested by H. & M., that the same basis shall also apply on its uptown New York line where the fare has been a straight 10 cents.

The present report by Commissioner Porter comes out of the further hearing

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of limited scope which the commission ordered "out of an abundance of caution" after the City of Jersey City, N. J., had alleged in a court complaint that protestants had not been given a full hearing. "Upon the amplified record," it makes six specific findings of fact which led the commission to its conclusion.

Commissioner Miller, concurring in part, adhered to his previously-expressed view that the straight 10-cent fare originally sought by the H. & M. had been justified. Commissioners Mahaffie and Patterson agreed with Mr. Miller, while Commissioner Aitchison did not participate in the disposition of the case. The majority opinion authorizes the H. & M. to make the approved fare effective on 15 days' notice.

Would Fix Kentucky's Liability Under Unemployment Act

Senator Chandler, Democrat of Kentucky, has introduced Senate Joint Resolution 96 which would fix at $1,260,000 the amount which Kentucky is required to transfer to the Railroad Unemployment Insurance Account out of general unemployment insurance funds collected from railroads prior to the establishment of the federal system for railroad employees. As the resolution points out, this transfer in accordance with section 13 of the Railroad Unemployment Insurance Act has been executed with respect to all states except Kentucky.

Club Meetings

The Canadian Railway Club will meet December 6, 8 p. m., Windsor Hotel, Montreal. The paper to be presented by J. R. Jackson, engineer of tests, Missouri Pacific, is entitled "The A.A.R. Journal Box Assembly in Freight Interchange Service," which will include the subject of "Hot Boxes."

The Northwest Car Men's Association will next meet December 6, 8 p. m., the Midway Club, St. Paul, Minn. D. R. Manuel, vice-president, Frost Paint & Oil Corp., Minneapolis, will discuss "Painting and Manufacturing of Paint."

At the December 9 meeting of the Central Railway Club of Buffalo, 8 p. m., Hotel Statler, Charles Bowen, agent, Erie (Castile, N. Y.), will tell of the "Troubles and Duties of a Rural Railroad Agent," and G. H. Higley, supervisor of air brakes, Erie, will speak on "Transportation Development."

The December 21 meeting of the Car Department Association of St. Louis will be the annual Christmas party and election of officers for 1944. Prizes will be awarded for short papers presented during the year by men in the ranks. The meeting at 8 p. m. in Hotel DeSoto will follow a 5:30 social and dinner hour.

"Maintenance of Way—Why and How" is to be discussed by A. L. Bartlett, engineer, maintenance of way, New York, New Haven & Hartford, at the December 15 meeting of the New England Railroad Club, 6:30 p. m., Hotel Vendome, Boston. Though meetings are held as a rule on the second Tuesday of the month, it has been necessary in this instance to postpone the December meeting one day.

New England Trucks May Have a 4 Per Cent Rate Increase

In a report and order Division 3 of the Interstate Commerce Commission has denied without prejudice rate increases amounting to some 12½ per cent which were sought by common carrier truck operators operating in New England and between certain areas in New Jersey and New York and New England, thus conforming to the proposal of its examiners, as reported in *Railway Age* of September 18, page 471, and to the decision in the case of operators in the Eastern territory. The report is in I. & S. Docket No. M-2247.

The way is left open for the New England operators to obtain a 4 per cent increase, however, which was the amount allowed the Eastern carriers in the I. & S. No. M-2222 proceeding, as reported in *Railway Age* of August 14, page 290. That tariffs making an increase of that amount effective would receive its approval was indicated by the division's finding that a 4 per cent increase would be just and reasonable, since it would result, as nearly as could be estimated, in putting the New England carriers in the same position to earn a fair return as those in the East.

In establishing increased rates in conformity with these findings, the division went on to say, fractions may be resolved to the nearest cent, and rates 12 cents and under may be increased by one-half cent, except that in increasing minimum charges per shipment the charge may be increased to the next highest multiple of 5 cents.

The division's report pointed out that the Director of Economic Stabilization and Price Administrator had opposed a general increase in rates on the ground that any increase, no matter how small, would have a tendency to inflate commodity prices.

Order May Halt Cross-Hauling of Processed Foods

A warning that unless a 10 per cent saving in car use is effected in the transportation of processed foods within six weeks through the voluntary efforts of the industry, mandatory orders will be issued by government agencies curtailing cross-hauls and back-hauls, was made at a meeting of representatives of the War Food Administration and the food industry at Chicago on November 12. As a result of the seriousness of the situation, a committee of food industry representatives was formed to formulate ways and means of effecting a reduction in cross and back hauling.

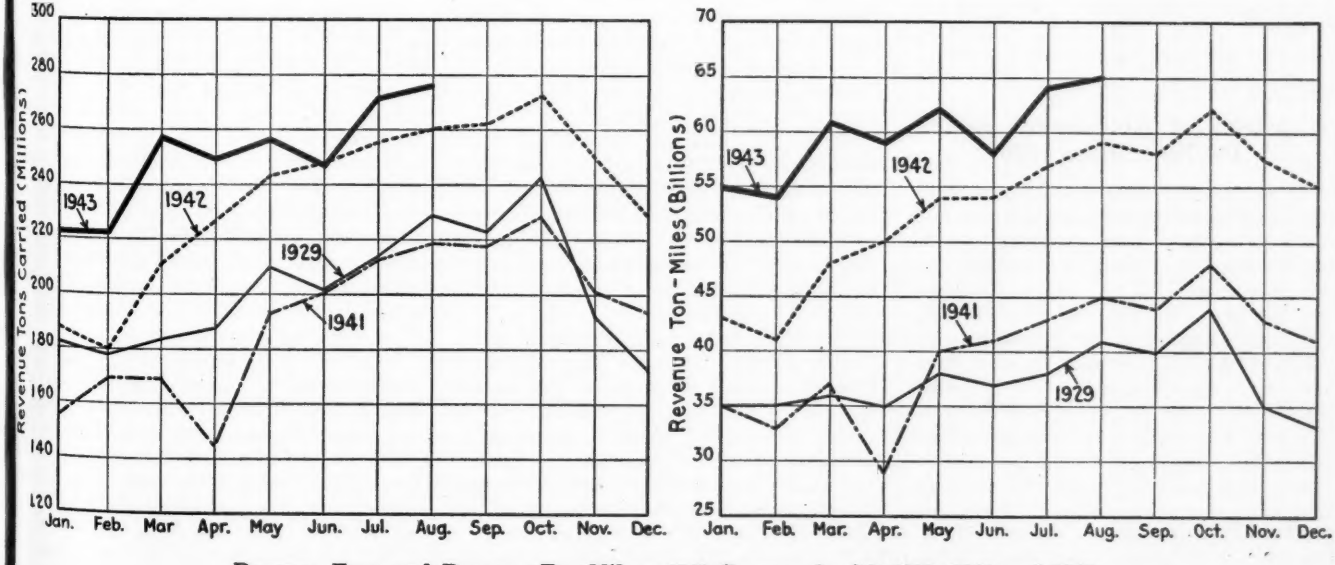
Transfer of Forwarder Rights

The Interstate Commerce Commission last week made public an October 21 order prescribing rules and regulations to govern transfers of rights to engage in service as a freight forwarder in interstate commerce. The new regulations become effective December 21.

Freight Car Loading

The total of carloadings for the week ended November 13 was not available at the time this issue of *Railway Age* went to press.

Loading of revenue freight for the week ended November 6 totaled 754,724 cars, and



Revenue Tons and Revenue Ton-Miles—1943 Compared with 1929, 1941 and 1942

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the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, November 6

District	1943	1942	1941
Eastern	143,543	149,783	180,280
Allegheny	150,722	173,357	182,552
Pocahontas	18,773	53,139	57,373
Southern	103,740	121,164	122,546
Northwestern	134,357	125,104	135,570
Central Western	129,975	134,372	135,838
Southwestern	73,614	72,744	59,423
Total Western Districts	337,946	332,220	330,831
Total All Roads	754,724	829,663	873,582
Commodities			
Grain and grain products	56,428	42,006	35,532
Live stock	26,333	20,765	18,766
Coal	42,863	163,193	164,577
Coke	11,833	14,270	13,425
Forest products	43,772	42,398	42,455
Ore	72,653	67,208	56,945
Merchandise l.c.l.	104,621	91,524	158,966
Miscellaneous	396,221	388,299	382,916
November 6	754,724	829,663	873,582
October 30	883,678	890,560	894,745
October 23	905,319	903,262	913,605
October 16	912,328	901,251	922,884
October 9	906,276	909,250	903,877
Cumulative Total 45 Weeks	36,777,665	37,581,096	36,694,338

In Canada.—Carloadings for the week ended November 6 totaled 71,882 compared with 77,835 for the previous week and 68,974 for the corresponding period last year, according to the compilation of Dominion Bureau of Statistics.

Total for Canada:	Total Cars Loaded	Total Cars Rec'd from Connections
Nov. 6, 1943	71,882	38,654
Oct. 30, 1943	77,835	39,238
Oct. 23, 1943	73,101	37,901
Nov. 7, 1942	68,974	35,029
Cumulative Totals for Canada:		
Nov. 6, 1943	2,955,401	1,692,172
Nov. 7, 1942	2,917,216	1,524,035
Nov. 8, 1941	2,749,048	1,339,000

Los Angeles Transportation Club Elects Officers

Officers elected at the annual dinner of the Los Angeles Transportation Club on November 11 are as follows: President, E. A. Coons, assistant freight traffic manager of the Union Pacific; first vice-president, Wm. H. Gorman, director of the Southern district of the California Railroad Commission; second vice-president, Walter W. Jordan, Western traffic manager of Canada Dry Ginger Ale, Inc.; and secretary-treasurer, James R. McIntyre, owner of the Coast Carloading Company.

Expenses of Retirement Board Decline Since 1940

Administrative expenses of the Railroad Retirement Board have declined each fiscal year since 1940, according to the board's monthly review for October. For the fiscal year 1943, the report continues, the cost was $5,040,000, of which $2,856,000 was expended on the retirement system, and $2,184,000 on unemployment insurance and employment service activities. The largest item, 78 per cent of the total, was paid out for personal services. Rents and utilities accounted for 4.3 per cent.

In a distribution of expenses by organization units, the review states, 33 per cent was spent for employment service and unemployment insurance operations, 14 per cent for retirement administration, and 21 per cent for general administration. Executive, planning, and staff services took 14 per cent.

Military service totaling over 2,000,000 months was performed by some quarter of a million railroad workers during the fiscal year 1943, according to minimum estimates based on reports from employers, the report continues. The cost of that part of retirement benefits which is based on service in the armed forces is borne by the government. For military service credits based on the 1942-43 service, the amount to be appropriated to the retirement account is $21,317,000, plus interest.

At the end of the 1943 fiscal year, the board had not yet adjudicated any claims in which credit for service in the present war was involved. However, credit based on service in the armed forces in earlier years had been claimed in 1,605 cases. The cost to the government of annuities thus far certified, which were based in part on such service, was $460,000 in 1942-43 and $461,000 in 1941-42, exclusive of interest.

Retirement benefit payments reached a new high for the third consecutive month when a total of $11,227,000 was certified to the Treasury in September, according to the review. Of this amount, $10,403,000 was payable on 161,800 monthly benefits in force at the end of the month.

Annuity applications numbered 1,780, slightly more than in August. Fewer annuities were certified in September than in August, however, the figures being 1,604 and 1,764, respectively. To date, 181,879 annuities have been certified, of which 134,112 were in force at the end of September, at an average payment of $66.20. Pensions in force numbered 23,554, and averaged $59.09. There were 3,490 survivor annuities in force, at $31.87, and 618 death-benefit annuities, at $35.37. Lump-sum death benefits certified during the month numbered 1,317, and the average amount paid was $362.55.

Decreases in railroad employment from mid-August to mid-September resulted in only a slight increase in the number of claims filed for unemployment insurance benefits, the report states. Claims for the first quarter of the benefit year totaled 6,100, about 17 per cent of the number filed in the same period last year. Only 450 applications for certificate of benefit rights were received during the month. For the quarter, 2,000 certificates were issued, compared with 11,200 last year.

From July through September, 4,350 unemployment insurance benefits were paid, in the amount of $111,400. In the last month of the quarter, 1,580 benefits were certified for $42,000. About half of the benefits paid for unemployment experienced in the current benefit year went to residents of only 10 states.

Job placements in September totaled 26,700, a drop from the unusually high number recorded in August. The decline was due, at least in part, to a further tightening of the labor supply. Hundreds of thousands of workers were taken to harvest fall crops, and similar numbers returned to school, resulting in a decline in placements of laborers, particularly.

Personnel needs for September, as reported to the Board, were more acute than in the preceding month, rising from 92,000 to 107,000. Reporting employers around the Great Lakes area indicated a need of 21,500 workers; those in the New England and Middle Atlantic States had a shortage of 20,100; and the far western area reported a need of 18,000.

RRs to Hold Their Own in Postwar Era

(*Continued from page 840*)

"E. Study of effect upon the efficiency, economy, flexibility and utility of railroad plant resulting from the development of new materials, appliances and techniques."

At the same time, the A.A.R. vice-president pointed out, committees are working with those who produce traffic to find out what their plans are as to postwar production and distribution, in order to be able to estimate how this traffic probably will be divided among the five competing forms of transportation—rail, air, water, motor, and pipeline. To facilitate these studies of what the country is likely to produce and how its products are to be distributed, regional offices are being set up throughout the country, he added, and explorations also are being made of such matters as traffic policies and rate adjustments as affected by the general plans and purposes of industry.

The speaker prefaced these comments with a brief survey of the railroads' wartime achievements in handling commercial and military traffic, in which connection he paid tribute to the cooperation of shippers and receivers of freight, individually and as organizations, and to the equally effective cooperation of the military services in using rail facilities only for the purpose for which they were intended, that is, transportation.

"What has been accomplished by the railroads is a source of great gratification to all of us who have devoted our lives to the railroad business," said Judge Fletcher "Possibly our sense of satisfaction is quickened somewhat by the plight of those prophets of evil who for so many years have been predicting that the railroads would certainly break down under the strain of war and that it would be necessary for the government to take them over, in order to insure that character of cooperation that was essential to the orderly movement of the war traffic.

"All of us can remember the gloomy prophecies of these self-constituted transportation seers, who had convinced themselves by facts, figures and so-called logical processes that the railroads, with a diminished plant, could not possibly take care of the demands which would be made upon them when the war effort reached its climax," he continued. "We do not hear a great deal from these people just now.

"For a time after the war started, they kept moving the critical period up six months at a time, saying that the railroads had been fortunate enough to handle the traffic in a fairly satisfactory manner in the earlier stages of the war, but the time would soon come when they would be overwhelmed by the magnitude of the load. Every careful student of the transportation problem seems now to be convinced that

the peak of the war load has been reached and that the transportation facilities of the country are not likely to be burdened more heavily than at the present time.

"It is true, of course, that here and there, where special circumstances are present, the railroads have not been 100 per cent efficient in moving all the civilian traffic that has been offered. It must be admitted that there has been some delay in furnishing cars for the movement of grain in the Northwest, although the situation is improving and it is not considered likely that there will be any loss to the farmers by reason of the temporary delay. . . . On the whole, the country is convinced that the railroads have taken care of the situation in a way to excite the admiration and win the applause of American business men and of those who are directly responsible for the conduct of the war."

The teachings of research and the pressure of competition will impel the railroads to undertake immense improvements in their plant and equipment when the war is over, said Judge Fletcher at another point. The question naturally arises, he remarked, whether the roads will be in a position to finance such a program of improvements in track and terminals and rolling stock. "I am very hopeful," he continued, "that the railroads will emerge from the war with something like $1,500,000,000 in cash, which they can employ in the process of turning from the activities of war to the pursuits of peace. Certainly, they will need that amount and more, if they are to keep their place in the transportation world."

Would Approve Pooling of Refrigeration Earnings

Examiner F. L. Sharp has recommended in a proposed report that the Interstate Commerce Commission approve an arrangement among railroad proprietors of the Fruit Growers Express Company "for the distribution among themselves of the net gain or loss resulting from protective service furnished in connection with interline shipments initially placed under refrigeration on the lines of petitioners and moving under section 2 of the Perishable Protective Tariff."

The pooling authority is sought by 36 roads, all of the carriers that are proprietors of F. G. E. except the Louisville & Nashville, which has offered no opposition to the petition. The proposed report is in No. 29008.

Blames Gallup, N. M., Collision on Signal Lay-out

While the judgment shown by some of the employees involved was criticised, the primary cause of the rear end collision on the Atchison, Topeka & Santa Fe at Gallup, N. M., on August 20, according to the report of the investigation made by the Interstate Commerce Commission under the supervision of Commissioner Patterson, was failure to provide an adequate block signal system at the point where the accident occurred.

The commission's report recommends that the road install continuous track circuits and establish definite maximum authorized speeds for its trains.

The accident involved the second and third sections of train No. 3, the westbound "California Limited," and occurred on double track main line where train movements are controlled by timetable, train orders and an automatic block signal system. It resulted in the injury of 190 passengers, 11 employees, and 2 persons carried under contract.

The collision occurred at 6:16 p. m., while the second section was standing at the station at Gallup, with its rear end 565 ft. east of the station. As this point is approached from the east there is a slight descending grade, while the track consists of a tangent, a 2,656 ft. compound curve to the left, with maximum curvature just over three degrees, and a tangent 833 ft. to the point of the accident and 1,132 ft. beyond.

Operation of Third No. 3 on this occasion was subject to the indications of two automatic signals, No. 1563, which was 2,624 ft. east of the point of the accident, and No. 1561, which was 5,170 ft. further east. Signal No. 1563 was of the two-indication (i. e., yellow and red), color light type, continuously lighted, and the controlling track circuit was so arranged that when a train occupied any portion of the track up to a point 2,296 ft. to the west, where the circuit ended, a stop and proceed aspect would be displayed. When a train passed beyond the end of the track circuit, as Second No. 3 did on this occasion, the signal displayed a yellow, or proceed at restricted speed indication. There is, in other words, a section of track—3,276 ft.—at Gallup station which is not protected by track circuits, and Second No. 3 was occupying this segment of track when it was struck by Third No. 3.

Third No. 3 was running about 68 m.p.h. when it passed signal No. 1561, which was arranged to display clear under the circumstances. Speed was reduced by a brake application to about 55 m.p.h, according to the speed recorder tape—though the engineer estimated his speed at 45 m.p.h.—by the time the train passed signal No. 1563, and the brake valve was put in emergency position about 1,500 ft. east of the point of accident, when the engineer saw the end of the standing train and its flagman's signals. The third section was running about 20 m.p.h. when it struck the rear end of Second No. 3, and the force of the impact moved the standing train forward about 40 ft.

The second section consisted of a locomotive and 18 cars, of which all except the last car, a coach, were baggage, express, or freight cars. The third section included 19 cars, with eight freight, express and baggage cars immediately behind the engine and 11 passenger cars of various types following. None of the cars carrying passengers in Third No. 3 was damaged in the collision. The all-steel coach at the rear of Second No. 3, however, was suspended above the rails on the front end of the locomotive which struck it, while it telescoped the rear end of the all-steel box car ahead of it about 5 ft.

When Second No. 3 reached Gallup, the flagman left the train at a point about 1,500 ft. east of its rear end, and remained there until he was recalled by a whistle signal about 4 min. before the accident occurred. He had proceeded to within some 200 ft. of the train when he observed that express was still being loaded at the station, and from that point ran toward Third No. 3, giving stop signals, as soon as he observed its approach. Nevertheless, the commission's report points out, he did not leave torpedoes or a lighted fusee to protect his train during the time he was returning to it after being called in.

The commission's report also points out that Third No. 3, under the rules, should have been operated beyond signal No. 1563 at such speed that it could be stopped short of another train. However, it explains, this train was authorized to operate without speed restriction from signal No. 1561 to signal No. 1563, but was required to be prepared to stop short of a train or obstruction at any point beyond signal No. 1563 until the next signal was reached west of the station at Gallup. The movement of Third No. 3 at restricted speed west of signal No. 1563, therefore, the report goes on to say, "depended entirely upon the engineer taking necessary action at a considerable distance east of this signal where he was authorized by signal indication to operate at maximum speed."

According to the commission's order of April 13, 1939, the report adds, automatic block signals should be controlled automatically by continuous track circuits on main tracks and on other tracks where medium speed is permitted, medium speed being defined as one-half of authorized speed. "If the track circuits had been continuous in this territory," it concludes, Third No. 3 "would have received an approach indication at signal No. 1561 and a stop-and-proceed indication at signal No. 1563. It would have been required to stop at the latter signal, and the accident would have been averted."

Contracts for Temperature Control Services Approved

Three additional contracts for protective services (i. e., temperature control services on perishable freight) have been approved by the Interstate Commerce Commission, Division 3, in a fifth supplemental report in the Ex Parte No. 137 proceeding. The contracts are between the New York Central and Merchants Despatch Transportation Corporation; the Stewartstown and Fruit Growers Express; and the East Tennessee & Western North Carolina and F. G. E.

The majority report represented the view of Commissioners Mahaffie and Miller. Commissioner Johnson, dissenting in part, disapproved the latter two contracts, "because the unit prices are 10 per cent higher than those assessed against proprietary railroads" of F. G. E.

Opposes Unification of Canada's Railways

John Bracken, leader of Progressive Conservative party in Canada, in an address last week said he would be "unalterably opposed" to any move to unify the two railroad systems of Canada.

"I think we get better service because of the competition of the privately-owned road

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with the government-operated system", he said.

Provision would be made by a Progressive Conservative government to inquire into the creation of a fully integrated system of transportation in Canada—a system adapted to furnish the nation with the cheapest and most effective service possible consistent with the maintenance of the independent identity of the two great railway systems and without amalgamation or unification, he said.

September Rail-Air Express

September air express cargo in combined rail-air service totaled 34,664 shipments, revealing an increase of 26.7 per cent over the same month a year ago. The air express division of Railway Express reports also that, in comparison with September, 1942, charges on these shipments were up 47.4 per cent.

Five Railroads Charged With Violating Elkins Act

Five railroad companies, a Zeeland, Mich., produce dealer and a Green Bay, Wis., cannery are charged with violating the Elkins Act in a suit filed by the Government in the federal district court at Grand Rapids, Mich. The respondents are the Pennsylvania; the New York Central; the Pere Marquette; the Grand Trunk; the Chicago & North Western; Robert S. Debruyn, part owner and agent of the Debruyn Seed & Produce Co., Zeeland; and the Larson Company, Green Bay.

The railroads are charged with performing icing service on shipments of celery and carrots from Grant, Muskegon, Hudsonville, Martin and Byron Center for the Zeeland Company without requiring the specification of that service in the bills of lading. The action, it is alleged, gave the shipper and receiver an illegal reduction in rates.

V. R. Hawthorne Addresses Western Railway Club

In an address at the November 15 meeting of the Western Railway Club in Chicago, V. R. Hawthorne, executive vice-chairman, A. A. R. Mechanical division, showed how the various divisions of the A. A. R. have cooperated with each other and with shippers, private car builders and government representatives to effect improvements in freight car maintenance and operating efficiency which are largely responsible for the successful handling of record railway freight traffic to date. The formal title of Mr. Hawthorne's address was "Car Activities of the Association of American Railroads," but his discussion covered the entire matter of car handling, including car service rules, per diem and demurrage rules, Regional Advisory Boards and shipper cooperation, as well as interchange rules and the activities of the Mechanical division.

NEW RAILWAY STATION.—Work on the proposed Port Elizabeth, South Africa, $2,000,000 railway station and offices will begin as soon as materials are made available. The station is to be at least eight stories high, possibly eleven, and the offices will house from 500 to 600 workers.

Abandonments

ATCHISON, TOPEKA & SANTA FE.—By order of Commissioner Porter, the effective date of the authorization given this company by Division 4 of the Interstate Commerce Commission to abandon a segment of a branch line from Virgil, Kans., to Benedict Junction, about 30 miles, and a segment from a point near Eureka, Kans., to Moline, about 34 miles, has been extended to December 20.

ATCHISON, TOPEKA & SANTA FE.—Division 4 of the Interstate Commerce Commission has denied this company's application for authority to abandon a line from Waveland, Colo., to Cheraw, 16.78 miles, without prejudice to a renewal of the application at the end of 1944 if by that time it can be shown that traffic has not increased or other considerations make abandonment of the line more urgent.

CHICAGO, BURLINGTON & QUINCY.—In a proposed report in Finance Docket No. 14161 Examiner R. Romero has recommended that the Interstate Commerce Commission authorize this company to abandon its lines from Humeston, Iowa, to Clearfield, 58 miles, and from Merle Junction, Iowa, to Clarinda, 27 miles.

COLORADO & SOUTH-EASTERN.—This road has applied to the Interstate Commerce Commission for authority to abandon a line from Chandler Junction, Colo., to D. & R. G. W. Junction, 1.2 miles.

DENVER & RIO GRANDE WESTERN.—This road has been authorized by Division 4 of the Interstate Commerce Commission to abandon a part of a branch from Eureka, Utah, to Silver City, 3.49 miles, and to abandon operation of a spur connecting that line with Mammoth Mill, 0.85 mile.

HARTWELL.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line from Bowersville, Ga., to Hartwell, 10.1 miles.

MONONGAHELA.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon an 0.89-mile segment at the end of its Moser Run branch in the vicinity of Edenborn, Pa.

NORTHERN PACIFIC.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon a part of a branch line from Stuart, Mont., to Norton Junction, 2 miles.

OKLAHOMA CITY-ADA-ATOKA. — This road has applied to the Interstate Commerce Commission for authority to abandon its line from Tupelo, Okla., to Coalgate, 14.8 miles, and to abandon operation over a line, leased from the Missouri-Kansas-Texas, from Coalgate to Atoka, 13.7 miles.

PENNSYLVANIA-READING SEASHORE LINES.—In a proposed report in Finance Docket No. 14100 Examiner Ralph R. Molster has recommended that the Interstate Commerce Commission deny this road's application for authority to abandon a branch from Cape May Court House, N. J., to Stone Harbor, 3.9 miles, on the ground that its continued operation would not impose an undue burden on the road, while its abandonment would be a detriment to the communities it serves.

READING.—This company has applied to the Interstate Commerce Commission for authority to abandon a 235-ft. segment at the end of its Excelsior Colliery branch.

ST. LOUIS SOUTHWESTERN. — At this road's request, Division 4 of the Interstate Commerce Commission has dismissed its application for authority to abandon its line from Truman, Ark., to McDonald, 30.7 miles.

Equipment and Supplies

FREIGHT CARS

The CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC has been authorized by the federal district court at Chicago to construct 200 automobile box cars and 500 50-ton self-clearing hopper cars. According to the petition, the necessary authorization from government agencies for the required materials has been secured.

Construction

LOUISVILLE & NASHVILLE.—This road is rebuilding a portion of its freight house at Nashville, Tenn., which burned on July 17, 1943. Old foundations and a one-story brick wall on one side are being reused. The building will have a single-story section 304 ft. by 51 ft. and a two-story office section 109 ft. by 51 ft., with an outside platform 413 ft. by 9 ft. The construction is of brick, with an asbestos shingle roof over the office section and an asphalt roof over the one-story section. The estimated cost is $43,166.

WAR DEPARTMENT.—The U. S. Engineer office, Baltimore, Md., has awarded a contract, amounting to about $20,000, to Brown, Davis & White, Grantville, Pa., for the construction of additional railroad facilities in Pennsylvania. The U. S. Engineer office, San Francisco, Cal., has awarded a contract, amounting to about $20,000, to Ben C. Gerwick, Inc., San Francisco, for the construction of additional railroad facilities in California.

WAR DEPARTMENT.—The U. S. Engineer office, New York, has awarded a contract, amounting to about $60,000, to Senior & Palmer, Inc., New York, for the construction of spur tracks in New Jersey. The U. S. Engineer office, Pittsburgh, Pa., has awarded a contract, amounting to about $50,000, to the Warren Construction Company, Warren, Ohio, for surfacing railroad track, cleaning and ditching, in Ohio.

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Supply Trade

Pullman-Standard Launches Three Ships in Two Weeks

The launching of three ocean-going patrol vessels in two weeks sets a new record for the ship building plant of the **Pullman-Standard Car Manufacturing Company.** At a launching on November 14 of the latest PCE vessel to be built at its Calumet Harbor yards, C. A. Liddle, president of the company pointed out that the company has constructed 16 vessels since ship building was undertaken by the company in April of this year, of which 15 are being manned by the British. He also said that the sixteenth vessel is the first ship to be delivered by the company to the U. S. Navy for operation by American seamen. Continuing he said, "Only five days ago we launched our last British ship and to-day we are launching the third vessel to slide down these ways during the first half of November."

Commander Paul S. Goen, assistant supervisor of shipbuilding, Chicago, told the audience that the success of allied warfare against Axis submarines had resulted in a shift of Naval strategy and that Pullman-Standard's Calumet Harbor yards had been indicated as one of those chosen to be made available for the building of ships for offensive sea action.

With Mrs. Frank M. Gunn acting as sponsor of the ship, several of the speakers paid tribute to her husband, who is works manager of the shipbuilding division. J. W. Geddes, superintendent of the shipbuilding division, as master of ceremonies, said that "newer members of the Pullman-Standard family may not know the part Mr. Gunn has played in making possible this shipbuilding activity here in the Middle West." He explained how Mr. Gunn "believed, when others doubted, that men and machines which had built railway equipment could also build ocean-going ships and he carried that story to Washington where he earned the support of experienced shipbuilders in the Navy department."

Colonel Robert R. McCormick, editor and publisher of the Chicago Tribune, as guest speaker, declared "it is time to speak for America and Americans", warning against subversive influences in the country. "During the years of our national youth, of our comparative weakness, the hatred of monarchies welded the patriotism of the people of this republic", he said. "It was only after we developed our great strength that conspiracies were formed to break down our national feeling and pass us under various foreign yokes."

The **Whiting Corporation,** Harvey, Ill., has been awarded a white star to add to its Army-Navy "E" flag for continued meritorious service on the production front.

Joseph D. O'Flaherty has been appointed assistant manager in charge of sales and promotion for the **United States Electrical Tool Company,** Cincinnati, Ohio. He was formerly branch manager of the Schacht Motor Company, Columbus, Ohio, and for 13 years was sales manager of the Diamond-T Truck Company of Cincinnati. **Al. H. Kohnen,** formerly associated with the Estate Stove Company, Hamilton, Ohio, has been appointed in charge of the company's Pittsburgh, Pa., office.

J. F. Stephens, general manager of the industrial department of the **Gustin-Bacon Manufacturing Company,** has been elected a vice-president of the company.

R. K. Myers, former chief of the X-Ray section of the War Production Board, has been appointed sales manager of the **Kelley-Koett Manufacturing Company,** Covington, Ky.

The **Oliver Farm Equipment Company,** Shelbyville, Ill., has taken over the manufacture of the products of the **Tallman Manufacturing Company** following the retirement from business of **G. L.** and **L. R. Tallman,** owners.

At the close of its first 50 years in business, the **Elwell-Parker Electric Company,** Cleveland, Ohio, publishes a volume which reviews the concern's development since 1893 against the background of the nation's progress in the same period. Entitled "Lengthened Shadows" and written in an informal news style, the book covers the growth of the company, and, to a considerable extent, that of the industrial truck industry after 1906, the year that Elwell-Parker furnished motors for the first crude baggage-handler for the Pennsylvania.

The title of the book alludes to the rapid development of mobile truck equipment following the introduction of the first models by Elwell-Parker. Other companies began manufacturing trucks in 1910 and thereafter. The expansion of the entire industry to its present important place has come through close cooperation between plant officials desirous of improving their methods of material-handling, and the truck manufacturer's own engineers.

Although the Cleveland organization has been in existence continuously for 50 years, the story reaches back to the birth in 1843 of Thomas Parker, one of the founders of the electrical industry in Great Britain. The old firm of Elwell-Parker Ltd. made motors and dynamos in Wolverhampton, England, and in 1893 licensed a separate company to build them in America. In its early years the company was influenced in several ways by Charles F. Brush, the inventor of the arc lamp and the storage battery. Not long after the turn of the century the British sold their Cleveland interest.

For some time the entire American output went to the old Brown Hoisting Machinery Company of Cleveland for use on its ore-handling equipment. Later Elwell-Parker supplied motors for electrical street vehicles, both passenger and commercial, but after 1910 the company turned seriously to the development of interior trucks for industrial uses. Discussing the evolution of American industry since the first World War, the book shows how the large-scale movement of materials by the power truck has strongly influenced modern methods of volume production, including even the architecture of industry.

William L. Stancliffe, vice-president in charge of miscellaneous sales and munitions, has been appointed vice-president in charge of sales of the **American Car & Foundry Co.,** to succeed the late William E. Hedgcock. He will continue to handle contractual relations between the company and the U. S. government having to do with the manufacture and sale of munitions of war. Mr. Stancliffe's early business training began with contracting engineers, and he took part in the construction of many well-known projects including the College of the City of New York and the Hell Gate Bridge. He later joined the Traylor Engineering & Manufacturing Co., serving as a member of the sales staff for a number of years. When the American Car & Foundry Motors Co. was formed in February, 1926, Mr. Stancliffe became its vice-president in charge of motor coach sales. He was transferred to the operating department of the American

William L. Stancliffe

Car & Foundry Co. in February, 1932, and appointed manager of miscellaneous sales in March, 1939. He subsequently was elected vice-president in charge of miscellaneous sales and munitions.

OBITUARY

Alexander Robert Mann, pioneer railway construction engineer and president of the Northern Construction Company, Vancouver, B. C., died recently in Vancouver. He was 82 years of age.

John K. Lansdowne, who retired on December 31, 1941, as vice-president in charge of sales of the Weir Kilby Corporation, Cincinnati, Ohio, died in that city on November 5.

Walter H. Hinsch, chief engineer of the Dearborn Chemical Company, Chicago, who was granted a leave of absence on January 1, 1942, to serve as lieutenant colonel of the 267 Field Artillery, was killed at Camp Van Dorn, Miss., on November 15 during maneuvers with live ammunition.

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Financial

BALTIMORE & OHIO.—*New Director.*—John D. Biggers, president of the Libbey-Owens Ford Glass Company, has been elected a director of the Baltimore & Ohio to succeed the late Joseph E. Widener.

BALTIMORE & OHIO.—*Modifications of Leases.*—This company has applied to the Interstate Commerce Commission for authority to modify its operating agreements with 26 subsidiary companies and to enter into an agreement with another subsidiary company, all controlled through ownership of substantially all their capital stock, for the purpose of bringing these agreements into conformity with the depreciation method of accounting ordered by the commission.

BALTIMORE & OHIO.—*Promissory Notes.*—This company and the Staten Island Rapid Transit, controlled through stock ownership, have applied to the Interstate Commerce Commission for authority to assume liability for and to issue, respectively, promissory notes in the amount of $502,400 representing indebtedness on the purchase under a conditional sales agreement of eight 1,000-h.p. diesel-electric switching locomotives from the American Locomotive Co., on which the subsidiary company will make a 20 per cent cash payment when delivery is accepted.

CENTRAL OF NEW JERSEY.—*State Board Denies Tax Appeal.*—The New Jersey state board of tax appeals on November 10 formally dismissed the appeal of the Central of New Jersey from a tax assessment of $78,187,344 for 1943 on its first and second class property, at the same time attributing control of the railroad by the Reading, and indirectly by the Baltimore & Ohio, as possible reasons for its bankruptcy. The board said that the hearings led to the suspicion that the reorganization proceedings begun by the carrier in 1939 resulted from one or more of the following causes: defective management; insufficient attention to the development of traffic possibilities; control by the Reading, owner of the majority of the Central's stock, and indirectly by Baltimore & Ohio, principal stockholder of the Reading; inadequate participation by the Central in through rates on freight interchanged with the Reading and the Baltimore & Ohio; unsound proportion of bonded indebtedness and capitalized rentals of leased properties, as contrasted with stock, in total capitalization, resulting in excessive proportion of fixed charges against income; and inadequate creation of reserves during the prosperous period prior to 1931, coupled with a policy of excessive dividends on stock during the same period. The board's affirmation of the 1943 tax assessment on October 28 was reported in the *Railway Age* of November 6.

CHESAPEAKE WESTERN. — *Acquisition.* — The Chesapeake Western Railway has applied to the Interstate Commerce Commission for authority to asquire the properties of the Chesapeake Western Railroad, which it controls through stock ownership and operates under lease.

CHICAGO & NORTHWESTERN.—*Substitution of Equipment.*—Division 4 of the Interstate Commerce Commission has approved the substitution of 417 composite type box cars in place of 417 all-steel box cars under this road's first equipment trust of 1942.

CHICAGO, ROCK ISLAND & PACIFIC-COLORADO & SOUTHERN.—*Lease of Burlington-Rock Island.*—These roads, and their respective subsidiaries, the Chicago, Rock Island & Gulf and the Fort Worth & Denver City, propose, subject to the approval of the Interstate Commerce Commission, for which an application has been filed, to operate the line of the wholly-owned Burlington-Rock Island from Teague, Tex., to Galveston, including segments operated under trackage rights, as joint lessees thereof. Through the elimination of the Burlington-Rock Island as an independent carrier, an annual saving of $86,911 is anticipated. The commission's approval has been sought for a lease agreement providing for a total rental payment of $150,000 yearly. Under an existing arrangement, that portion of the lessor's line from Waxahachie, Tex., and Teague already is operated under lease by the same roads.

FLORIDA EAST COAST.—*Reorganization Plan.*—Division 4 of the Interstate Commerce Commission has set December 15 as the date for further hearing at Washington, D. C., before Director Oliver E. Sweet of the Bureau of Finance on the plan for this road's reorganization, thus complying with the action of the federal district court in referring the commission's plan back to it for consideration of modifications or of new plans.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*Reorganization Plan Accepted.*—On November 11, attorney for the dissenting bondholders' committee announced the committee would abandon its plans to appeal a decision of the circuit court of appeals approving the plan of reorganization of the railroad.

NEW YORK, SUSQUEHANNA & WESTERN.—*Franchise Tax Upheld.*—On November 10 the New Jersey board of tax appeals upheld a $120,721 franchise tax for the Susquehanna. The railroad had contended that the state tax commissioner had failed to allow legitimate exemptions.

PENNSYLVANIA.—*New Director.*—Arthur C. Dorrance, president of the Campbell Soup Company, has been elected a director of the Pennsylvania to succeed the late John E. Zimmermann.

SEABOARD AIR LINE.—*To Redeem Receivers' Certificates.*—On November 10 the United States district court at Baltimore, Md., authorized the redemption of $12,841,600 of receivers' certificates on December 16.

SOUTHERN.—*A. & C. Air Line Bonds.*—A numerous syndicate, headed by Halsey, Stuart & Co., has offered (subject to I.C.C. approval) an issue of $15,000,000 of first mortgage 3¾ per cent bonds of the Atlanta & Charlotte Air Line Railway, due 1963—priced at 100½.

TENNESSEE CENTRAL. — *R.F.C. Loan.* — Upon this road's request, Division 4 of the Interstate Commerce Commission has dismissed its application for approval of a loan of $414,000 from the Reconstruction Finance Corporation.

Average Prices Stocks and Bonds

	Nov. 16	Last week	Last year
Average price of 20 representative railway stocks..	34.55	34.29	28.93
Average price of 20 representative railway bonds..	78.25	78.10	68.13

Dividends Declared

Boston & Albany.—$2.25, payable December 31 to holders of record November 30.

Cleveland & Pittsburgh.—7% guaranteed, 87½¢, quarterly, payable December 1 to holders of record November 10.

Delaware.—$1.00, semi-annually, payable January 3 to holders of record December 15.

Erie & Fittsburgh.—Guaranteed stock, 80¢, quarterly, payable December 10 to holders of record November 30.

Lykens Valley & Coal.—40¢, semi-annually, payable January 3 to holders of record December 15.

New York Central.—Irregular, $1, payable January 15 to holders of record November 20.

North Pennsylvania.—$1.00, payable December 10 to holders of record December 3.

Northern Central.—$2.00, semi-annually, payable January 15 to holders of record December 31.

Pennsylvania.—Year-end, $1.50, payable December 13 to holders of record November 20.

Philadelphia & Trenton.—$2.50, quarterly, payable January 10 to holders of record December 31.

Pittsburgh & Lake Erie.—Irregular, $2.50, payable December 15 to holders of record November 19.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, $1.75, quarterly, payable December 1 to holders of record November 20.

Texas & Pacific.—$1.00, payable December 10 to holders of record November 26. Preferred, $2.50, payable December 27 to holders of record December 15.

Virginian.—62½¢, quarterly, payable December 22 to holders of record December 13.

West Jersey & Seashore. — Common, $1.50, quarterly, payable January 3, 1944, to holders of record December 15. Special guaranteed, $1.50, semi-annually, payable December 1 to holders of record November 18.

Railway Officers

EXECUTIVE

Thomas J. Thomas, who since December, 1941, has been associate deputy of the Office of Solid Fuels Co-ordination and the Solid Fuels Administration for War at Washington, D. C., has returned to Chicago to resume his positions of assistant to the president of the Chicago, Burlington & Quincy, and president of the Valier Coal Company.

FINANCIAL, LEGAL AND ACCOUNTING

Nathan T. Duff has been appointed transfer agent and registrar of bonds of the Pennsylvania at New York, succeeding **Anton P. Thruelsen,** who has retired from that position.

Charles L. Dautrich, assistant general freight claim agent of the Southern, has been appointed general freight claim agent of that road with headquarters at Chattanooga, Tenn., succeeding **Mitchell G. Ware,** who has retired after 37 years of

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HSGI
Wear Resisting PARTS

Progress On All Fronts

SHORT of men and equipment, our railroads have worked miracles establishing new high records all along the line, not only in passenger but freight service as well.

When Victory is won, and the railroads will again obtain needed replacements, passenger and freight service will reach new peaks in achievements.

In the Post-War Era, HUNT-SPILLER *Air Furnace* GUN IRON will continue to contribute greatly to these new achievements in transportation by helping the railroads to obtain greater mileage between replacements—maximum availability—lower fuel consumption per ton mile, lower maintenance and by helping in the conservation of materials and manpower.

HSGI
Reg. U. S. Trade Mark
Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings
Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings

Finished Parts
Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

HUNT-SPILLER MFG. CORPORATION
V. W. Ellet, *President* **E. J. Fuller, *Vice-Pres. & Gen. Mgr.***

Office & Works
383 Dorchester Ave. **South Boston 27, Mass.**

Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.
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International Rwy. Supply Co., 30 Church Street, New York, N. Y.

HUNT-SPILLER GUN IRON
Air Furnace

service. Mr. Ware was born at Greenville, S. C., on September 26, 1886, and received an L.L.B. degree from the Knoxville College of Law at Knoxville, Tenn. He entered railway service in May, 1906, in the freight claim department of the Southern. He served that road subsequently in several graduated positions. On March 1, 1936, Mr. Ware became general freight claim agent with headquarters at Chattanooga, and held that position until his recent retirement.

OPERATING

F. J. Gilmartin, general yardmaster of the Chesapeake & Ohio at Stevens, Ky., has been promoted to acting trainmaster of the Cheviot subdivision, with headquarters at Cheviot, Ohio, succeeding **A. E. Hannes,** who has been transferred to the Cincinnati division, replacing **S. H. Pulliam,** who has been granted leave of absence to enter military service.

W. C. Fox, trainmaster, Piedmont-Washington subdivisions of the Chesapeake & Ohio with headquarters at Charlottesville, Va., has been transferred to the Rivanna subdivision at Richmond, Va., succeeding **J. W. Knapp,** who has entered military service. **E. F. Houff,** assistant trainmaster of the Virginia Air Line subdivision with headquarters at Strathmore, Va., succeeds Mr. Fox at Charlottesville.

TRAFFIC

D. H. Voltz has been appointed general agent, freight department, of the Union Pacific with headquarters at New York.

H. Ray Coulam, general agent of the Western Pacific at Klamath Falls, Ore., has been transferred to Salt Lake City, Utah, succeeding **P. J. Peckens,** who has retired.

John H. Muller has been appointed assistant secretary of the joint steamship and railroad committee of the Maritime Association of the Port of New York. He succeeds **W. W. Kohl,** who has resigned.

Joseph A. Armento, district freight agent of the Pennsylvania at Chicago, has been transferred to Milwaukee, Wis., succeeding **Kenneth G. Crowl,** who has been transferred to Canton, Ohio.

William H. Suffield, general agent of the Illinois Central at Detroit, Mich., and formerly assistant freight traffic manager, with headquarters at Chicago, died at Detroit on November 15.

Raymond G. Owen, assistant freight traffic manager of the Union Pacific at San Francisco, Cal., has been promoted to freight traffic manager, with headquarters at Omaha, Neb., succeeding **E. J. Hanson,** whose death on October 21 was reported in the *Railway Age* of October 30. **K. G. Carlson,** assistant general freight traffic manager at Omaha, has been promoted to assistant freight traffic manager, with headquarters at San Francisco, succeeding Mr. Owen. **Martin Holbrook,** assistant to the vice-president, traffic, at Omaha, has been advanced to assistant general freight traffic manager, with the same headquarters, replacing Mr. Carlson, and **C. O. Showalter,** chief clerk to the vice-president, traffic, at Omaha, has been promoted to assistant to the vice-president, traffic, with the same headquarters. **H. J. DeLacy,** traveling freight agent, with headquarters at Milwaukee, Wis., has been advanced to general agent, with headquarters at Lincoln, Neb., relieving **Donald Sutherland,** who has been transferred to Minneapolis, Minn. **F. B. Swope,** general agent at New York, has been transferred to Cincinnati, Ohio, succeeding **J. R. Livsey,** who has been transferred to Tacoma, Wash. **D. H. Voltz,** general agent at Salt Lake City, Utah, has been transferred to New York, replacing Mr. Swope, and **J. W. Padden,** general agent at Tacoma, has been transferred to Salt Lake City, relieving Mr. Voltz.

MECHANICAL

Edwin F. Richardson, whose appointment as superintendent of motive power of the Bessemer & Lake Erie, with headquarters at Greenville, Pa., was announced in the *Railway Age* of November 6, was born at Shenango, Pa., on September 13, 1880. He entered railroad service on June 1, 1899, as a special apprentice of the Bessemer & Lake Erie. He then served successively as air brake inspector and air brake instructor until 1918, when he became assistant to the engineer motive power. Mr. Richardson was appointed assistant engineer motive power in November, 1936, and assistant superintendent motive power in May, 1939. This position he held until his recent appointment as superintendent of motive power with headquarters at Greenville.

Edwin F. Richardson

Lewis S. Billau, whose appointment as electrical engineer of the Baltimore & Ohio with headquarters at Baltimore, Md., was announced in the *Railway Age* of October 23, was born in 1884 at Cedar Rapids, Iowa. He was graduated from the University of Minnesota in 1905 with a degree in electrical engineering. In 1908 Mr. Billau entered the service of the Baltimore & Ohio as an inspector in the electrical department. In 1909 he was promoted to the position of assistant engineer, in 1910 became chief draftsman, and in March, 1914, he was appointed assistant electrical engineer. This position he held until his recent appointment as electrical engineer at Baltimore. Mr. Billau holds a life membership in the American Institute of Electrical Engineers; he is a member of the committee of direction, electrical section, mechanical division, and a member of the electrical section, engineering division, of the Association of American Railroads.

Lewis S. Billau

F. O. Young, chief draftsman of the Northern Pacific at St. Paul, Minn., has been promoted to mechanical engineer, with the same headquarters, succeeding **Arthur B. Childs,** whose death on November 4 was reported in the *Railway Age* of November 13.

PURCHASES AND STORES

Howard Crouse, whose promotion to purchasing agent of the Texas & Pacific, with headquarters at Dallas, Tex., was reported in the *Railway Age* of November 6, was born at Marshall, Tex., on August 12, 1897, and attended Southwestern University, Georgetown, Tex. He entered railway service in 1916 as an apprentice of the mechanical department of the T. & P. at Marshall, and in 1920 he was appointed a clerk of the stores department, serving in various clerical capacities until 1925 when he was

Howard Crouse

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promoted to general foreman of the stores department, with headquarters at Marshall. In 1928, Mr. Crouse was advanced to chief clerk of the general storekeeper, with the same headquarters, and in October, 1933, he was promoted to general storekeeper, holding that position until his new appointment, effective October 29.

W. E. Patterson has been appointed acting storekeeper of the Atlanta, Birmingham & Coast, succeeding **J. M. Lewis,** who has joined the armed forces.

P. W. Grayson has been appointed general storekeeper of the Texas & Pacific with headquarters at Marshall, Tex., succeeding **Howard Crouse,** whose promotion to purchasing agent, with headquarters at Dallas, Tex., was reported in the *Railway Age* of November 6.

SPECIAL

William E. Brennan, whose promotion to publicity manager of the Chicago, Rock Island & Pacific, with headquarters as before at Chicago, was reported in the *Railway*

Wm. E. Brennan

Age of November 6, was born at Preston, Minn., on March 16, 1904, and is a graduate of Marquette University and the University of Minnesota. In 1928 he became a member of the public relations staff of Marquette University and in 1940 he was appointed to a similar position with the University of Minnesota. Mr. Brennan entered railway service in 1942 as a member of the publicity staff of the Rock Island, holding that position until his new appointment, effective November 1.

ENGINEERING & SIGNALING

J. T. Derrig, assistant to the chief engineer of the Northern Pacific at St. Paul, Minn., has been promoted to acting assistant chief engineer, lines west of Livingston, Mont., with headquarters at Seattle, Wash., replacing **A. F. Stotler,** who has been granted leave of absence due to illness.

Walter S. Johns, Jr., engineer maintenance of way of the Northwestern district of the Pennsylvania at Chicago, has been promoted to assistant to the chief engineer, with headquarters at Philadelphia, Pa. **E. R. Schultz,** division engineer on duty in the office of the chief engineer at Philadelphia has been advanced to engineer maintenance of way of the Northwestern district with headquarters at Chicago, succeeding Mr. Johns.

H. L. Vandament, district engineer on the Chesapeake & Ohio, with headquarters at Huntington, W. Va., has been promoted to the newly-created position of principal assistant engineer, with headquarters at Richmond, Va., and **P. L. Graves,** resident engineer at Clifton Forge, Va., has been promoted to district engineer at Huntington, to succeed Mr. Vandament. **W. F. Drumeller,** chief clerk to the chief engineer, has been promoted to the newly-created position of assistant to the chief engineer, with headquarters as before at Richmond, Va.

OBITUARY

Lucien Brousseau, engineer maintenance of way of the Central region of the Canadian National with headquarters at Toronto, Ont., whose death on October 20 was reported in the *Railway Age* of November 13, was born at Sorel, Que., in 1887. He joined the Intercolonial railway as division engineer at Levis, Que., in 1913, and in 1920 he was appointed district engineer for the Canadian National at Quebec City. On July 1, 1939, he was promoted to the position he held at the time of his death.

Andrew D. Mims, vice-president and general manager of the Southern Pacific Lines in Texas and Louisiana, with headquarters at Houston, Tex., whose death on October 30, was reported in the *Railway Age* of November 13, was born at Houston on July 8, 1881, and attended the public schools in that city and Houston Business College. In 1895 he entered railway service on the Houston & Texas Central (now part of the Southern Pacific) as a messenger in the auditor's office at Houston and shortly thereafter he became a clerk in that department, where he remained until 1903 when he

Andrew D. Mims

was transferred to the office of the superintendent of the Southern Pacific Lines in Texas and Louisiana. After serving there as a clerk and timekeeper, Mr. Mims was advanced to chief clerk in the office of the engineer maintenance of way in February, 1907, then becoming transportation clerk in the office of the general manager in February, 1915. He was promoted to superintendent of the Galveston, Harrisburg & San Antonio (now part of the Southern Pacific) at Victoria, Tex., in 1919, later being transferred to the Houston division of the Southern Pacific Lines in Texas and Louisiana, at San Antonio. In March, 1930, he was advanced to assistant general manager, and in March, 1938, he was promoted to the position he held at the time of his death.

J. H. Walsh, who retired in 1940 as superintendent of the Austin-Dallas division of the Southern Pacific Lines in Texas & Louisiana, with headquarters at Austin, Tex., died in a hospital in that city on October 20. Mr. Walsh was born on a farm near Rockford, Ill., on September 3, 1867, and entered railway service in 1897 as a brakeman of the Southern Pacific Lines in Texas & Louisiana at El Paso, Tex. Later he served as conductor, trainmaster and assistant division superintendent, with headquarters at San Antonio, Tex., and on July 1, 1921, he was promoted to the position he held at the time of his retirement.

Blaine S. Hollimon, assistant general manager of the Southern Pacific Lines in Texas and Louisiana, with headquarters at Houston, Tex., whose death on November 3, was reported in the *Railway Age* of November 13, was born at Beaumont, Tex., on December 26, 1884, and entered railway service in February, 1901, as a machinist apprentice of the Southern Pacific Lines in Texas and Louisiana, subsequently serving as a telegrapher and train dispatcher. In 1913 he was promoted to chief train dispatcher at Jacksonville, Tex., being transferred to Houston in 1916. In 1919 Mr. Hollimon was advanced to assistant division superintendent, with headquarters at El Paso, Tex., and two years later he was promoted to division superintendent, with headquarters at Ennis, Tex. In 1935 he was transferred to San Antonio, Tex., and in 1938 he was promoted to the position he held at the time of his death.

Howard C. Phillips, former chairman Western Group, of the Engineering Committee of the Presidents' Conference Committee on Federal Valuation of the Railroads, died at his home in Winnetka, Ill., on November 14. Mr. Phillips was born at New York on May 6, 1869, and graduated from Princeton University in 1890. He entered the service of the Santa Fe in 1899 as an inspecting engineer, subsequently serving in various capacities until September, 1906, when he was promoted to chief engineer of the Coast Lines with headquarters at Los Angeles, Cal. From April, 1912, to August, 1915, Mr. Phillips served as valuation engineer of the Santa Fe System at Chicago, then becoming assistant general secretary of the Presidents' Conference Committee on Federal Valuation of the Railroads, later serving as general secretary of the same body. From May, 1918, to August, 1921, he served as chairman Western Group, of the Engineering Committee of the Presidents' Conference Committee on Federal Valuation of the Railroads at Chicago, resigning on the latter date to engage in consulting engineering practice.